



**Department of Navy  
Small Business Innovation Research  
Small Business Technology Transfer  
(SBIR/STTR)  
Year in Review  
Fiscal Year 2022**



***Delivering Innovation to Our Warfighters***

**June 2023**

## List of Abbreviations & Acronyms

DoD	Department of Defense
DoN	Department of the Navy
MCSC	Marine Corps Systems Command
NAVAIR	Naval Air Systems Command
NAVCENT	U.S. Naval Forces Central Command
NAVFAC	Naval Facilities Engineering Systems Command
NAVSEA	Naval Sea Systems Command
NAVSUP	Naval Supply Systems Command
NAVWAR	Naval Information Warfare Systems Command
NECC	Navy Expeditionary Combat Command
ONR	Office of Naval Research
PEO	Program Executive Office
PEO IWS	PEO Integrated Warfare Systems
PEO USC	PEO Unmanned and Small Combatants
PEO(A)	PEO Air Anti-Submarine Warfare, Assault & Special Mission
PEO(CS)	PEO Aviation Common Systems and Commercial Services
PEO(T)	PEO Tactical Aircraft Programs
PEO(U&W)	PEO Unmanned Aviation and Strike Weapons
SSP	Strategic Systems Program
SYSCOM	Naval Systems Command

### Prepared by:

Department of the Navy  
SBIR/STTR Program Management Office  
Arlington, Virginia  
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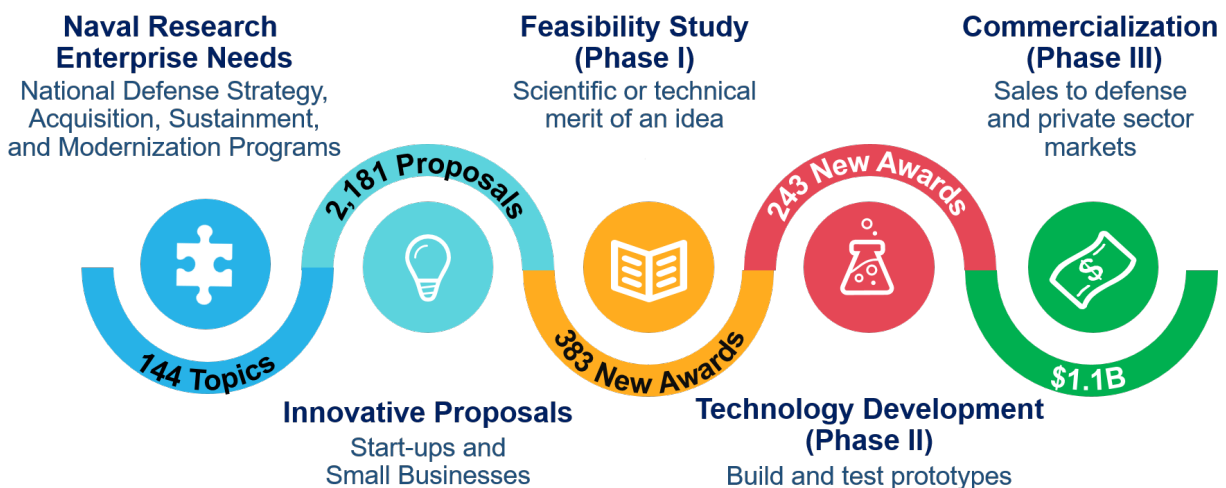
# Message from Leadership

Robert L. Smith | Director, DoN SBIR/STTR Programs

The Department of the Navy (DoN) SBIR/STTR achieved its success in part by building transition into our process and staying focused on its core mission of serving the technology needs of the warfighter. DoN SBIR/STTR's Phase III portfolio experienced unprecedented success with our small and large business partners, recording more than \$1.1B in non-SBIR gains in FY 2022 – a 17% increase over FY 2021. Working through the challenges of SBIR/STTR program reauthorization DoN SBIR/STTR evaluated over 2,100 proposals and made 626 new awards, obligating \$273M to advance critically needed innovation and technology.



DoN SBIR/STTR is proud of its FY 2022 results and stands ready to continue supporting our naval fleet and force customers so our Nation's warfighters have the groundbreaking, mission-critical technology they need. We remain committed to supporting small businesses and promoting investment in the Nation's defense industrial base.



## Naval Research Enterprise (NRE) Needs



In FY22, DoN SBIR/STTR offered multiple opportunities for small business to engage through two traditional DoD Broad Agency Announcements (BAA) in January and May 2022, and one DoD Open BAA in August 2022.

The **114 SBIR topics**, **26 STTR topics**, and **4 Direct to Phase II SBIR topics** represented innovative technology needs from seven DoN Systems Commands (SYSCOMs) in **11 DoD Critical Technology Areas** depicted below, scaled by value of investment.



Topics aligned to  
National Defense Strategy, Acquisition, Sustainment, and  
Modernization Programs



## Innovative Proposals

DoN SBIR/STTR received over 2,000 Phase I and Phase II proposals in FY22. Responding to the 140 new topics, and continuing Phase II work from previous BAAs, almost 1,000 small businesses from every state in the Nation and the District of Columbia proposed innovative solutions to DoN technology and Research & Development (R&D) needs.

**2,181 Proposals in FY22**

**1,948 Phase I Proposals**

**233 Phase II Proposals**

**990 Small Businesses**

**Average Size: 65 employees**

**From all 50 states and  
District of Columbia**

**21% are woman, minority,  
or veteran owned**



**On average, 30% of proposers are new to DoN SBIR/STTR**

## Feasibility Studies (Phase I)



DoN SBIR/STTR awarded 383 new Phase I contracts to a variety of small businesses in FY22.



While the majority of topics focused on materials, processes, sensors, and electronics, the proposals addressed a broad spectrum of Navy and DoD technology areas. Awards derived from seven SYSCOMs, with the majority coming from ONR, NAVAIR, and NAVSEA. New awardees were located in 39 states across the U.S. (See Appendix A.)





## Technology Development (Phase II)

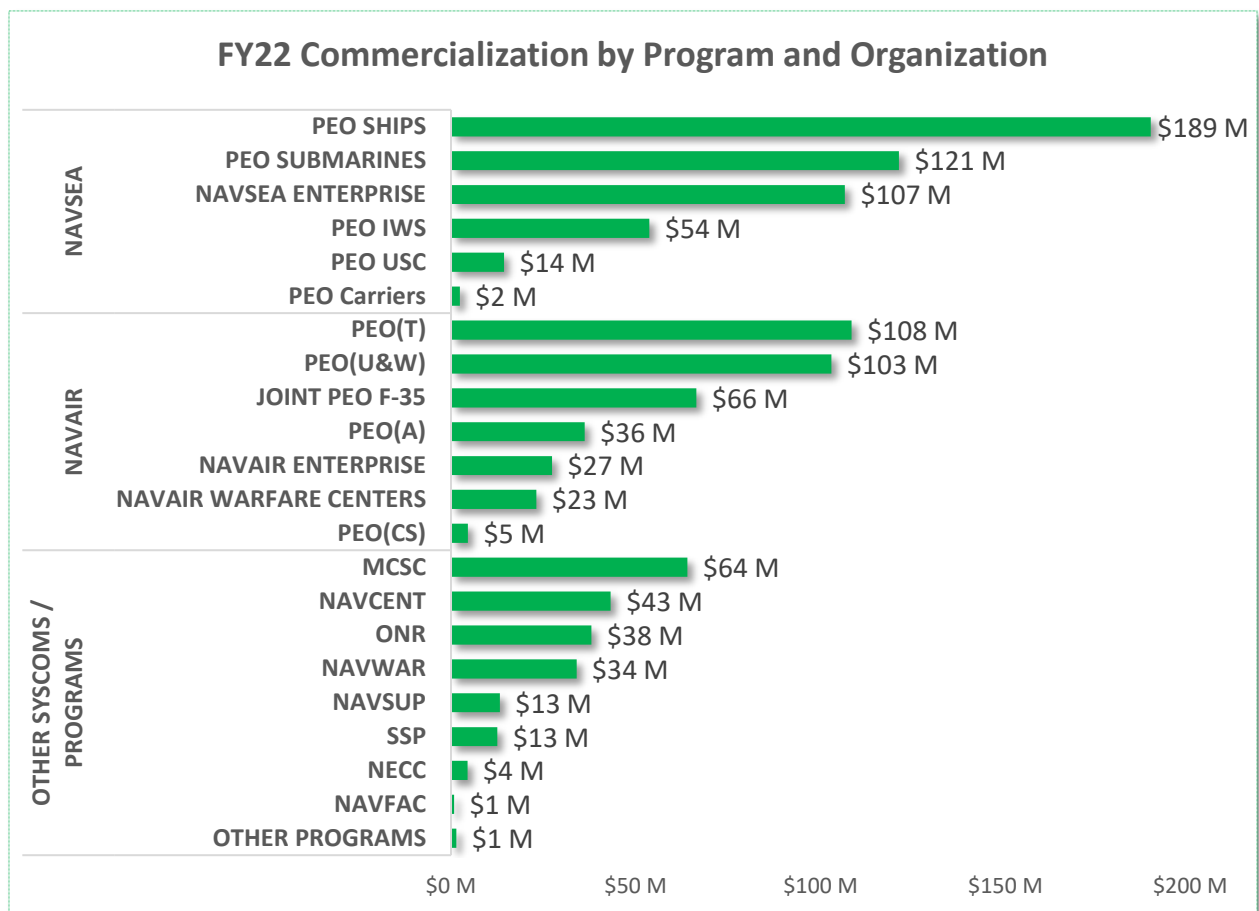
In FY22, DoN SBIR/STTR awarded 243 new Phase II contracts. Most awards continue technology development of recently completed Phase I feasibility studies. Over 20 contracts were Sequential Awards – derivative work based on Phase I or II contracts from another DoD agency. In a similar fashion, a few were Subsequent Awards – an additional Phase II contract to continue or expand upon a prior DoN SBIR/STTR award. In specific cases, firms with a completed and proven feasibility study received a Direct-to-Phase II contract, bypassing the Phase I effort. The **average Phase II award was \$1M** and the efforts covered 12 DoD Critical Technology Areas. These **177 unique firms**, representing 33 states, performed follow-on research & development on **221 SBIR/STTR topics** to meet the technology needs of seven SYSCOMs and the DoN as a whole.



## Commercialization (Phase III)



In FY22, the Department of the Navy broke the \$1B mark in Phase III funding, **obligating \$1.068B to 151 large and small businesses**. Over 220 awards derived from, extended, or completed efforts made under **215 prior SBIR/STTR topics**; 55 were new contracts. Every Navy SYSCOM benefitted from SBIR/STTR technology, especially NAVSEA and NAVAIR.



***DoN accounted for 50% of all DoD Phase III funding in FY22***

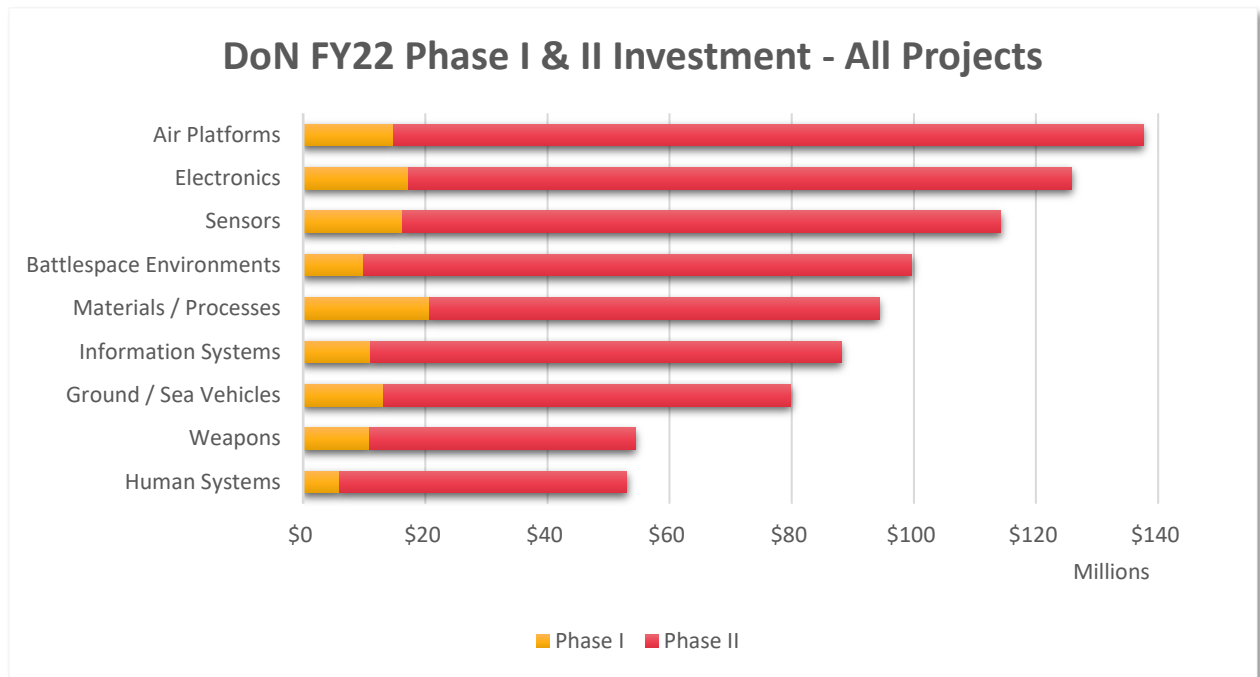


## Transition Success – How does DoN do it?

DoN SBIR/STTR utilizes multiple authorities, best practices, and programs – all with an end goal of helping Navy and Marine Corps SBIR/STTR projects transition to Programs of Record and gain commercial success.

### It starts with the topic...

Transition-focused topics begin at the SYSCOM level, based on warfighter needs and with a transition end state objective. PEOs, Program Offices, and Technology Managers identify and prioritize their needs – and funding. In FY22, DoN funded proposals submitted to 791 Navy topics: 526 Phase I contracts and 669 Phase II contracts, covering 13 Critical DoD Technology Areas. The top nine are shown below.



Note: Topics may align with multiple technology categories; therefore, category totals will exceed published obligations.

## **...and continues with transition tools and support.**

DoN continues to utilize the authorities granted in the federal SBIR/STTR programs, using them to assist small businesses with transition planning and strategy, testing and integration of technologies, and preparing for commercialization.

### **Navy SBIR/STTR Transition Program (STP)**

126 Small Businesses    152 Phase II Projects    17 Critical Technology Areas

STP is an 11-month Navy-specific program (NavySTP.com) that provides small businesses with a Business Consultant and Market Researcher to assist with:

- Mentoring on Government/prime contractor relationships
- Conducting market research appropriate to transition targets
- Identifying leads for potential transition opportunities
- Promoting technologies on the Virtual Transition Marketplace (VTM)
- Exhibiting at Forum for SBIR/STTR Transition (FST) and Focused Technology events

*“The Navy has demonstrated success in mentoring Phase II companies for increased transition of SBIR/STTR technologies...within the STP... The Committee recommends [funding] to enable the Secretary of Defense to expand the Navy’s SBIR/STTR Transition Program across the Department...”*

**Chairman, House Armed Services Committee**

## **Commercialization Readiness Program (CRP)**

17 Small Businesses    19 New Phase II Projects    \$5.2M CRP Funds

CRP is authorized to accelerate the transition of technologies, products, and services developed under the SBIR program to Phase III, including the acquisition process. One third of the 19 new CRP projects received \$3.3M in additional, non-SBIR program funding in FY22. This funding was in addition to the \$18M in SBIR funding obligated across all 19 projects. In FY22, DoN continued supporting 89 prior year projects and 57 prior DoN CRP projects transitioned to Phase III.

## **NAVY Launch**

74 Small Businesses    20 Focused Business Coaching Participants

NAVY Launch supports select Phase II projects with additional training, consulting, and market education. Projects are selected based on their dual-use capability and greater potential for commercial success beyond the defense industrial base. Of the 74 firms that completed workshops to prepare them for entering the commercial market, 20 were down-selected for customized acceleration coaching from a dedicated advisor in productization, investment readiness levels, investor due diligence, and commercialization.

## **DoN SBIR/STTR Experimentation Cell (DoN-SEC)**

87 Projects    7 Experiments    4 Events

DoN-SEC engaged with and evaluated a total of 87 projects for inclusion in experimentation, demonstration, and evaluation activities. This number includes 54 projects actively working towards experimentation and 30 that were in coordination but were either not ready or did not need further services. Three projects that received support conducted seven experiments across four events.

DoN-SEC connects SBIR innovators with the DoN Experimentation community to deliver innovative solutions for the warfighter. DoN-SEC provides the full spectrum of end-to-end facilitation, mentoring, and training in all aspects of experimentation.

## Final Thoughts

This report provides key stakeholders with a one-year comprehensive look at the DoN SBIR/STTR program. It examines the DoN's approach, portfolio, and impact in FY 2022. The replicable, scalable, and transparent methods provided in this report will allow us to monitor and refresh our analysis on an ongoing basis.

Fiscal Year 2022 was challenging in many respects. Facing a potential expiration of the federal SBIR/STTR programs without congressional reauthorization in September 2022, DoN was forced to adjust priorities and curtail the number of topics in the latter part of the fiscal year. Despite the pending sunset of SBIR/STTR authorities, DoN still recorded its best Phase III commercialization rate in recent years.

The reauthorization of SBIR/STTR in the final days of FY 2022 provided new hope and anticipation for expanded opportunities in FY 2023. Included in those opportunities are a renewed interest in outreach to small businesses to engage more minority, woman, and veteran owned small businesses, and expand efforts in regions within the Small Business Administration's revised HUBZone areas. DoN SBIR/STTR will also pilot Open Topics in 2023, with a focus on mission critical technology areas where the Navy and Marine Corps warfighters have need for innovation.

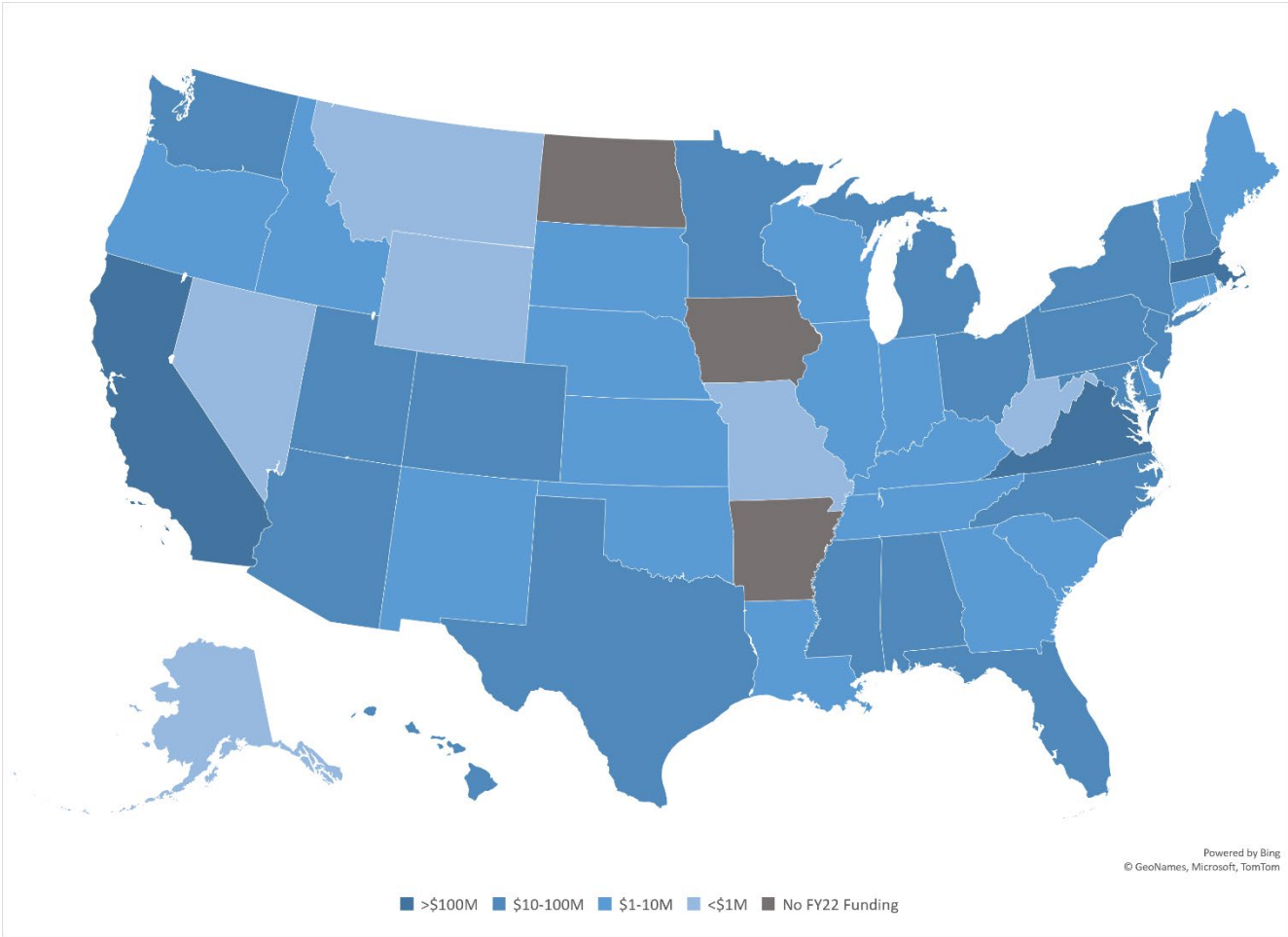
In making this fiscal year analysis publicly available, DoN SBIR/STTR is providing transparency to its stakeholders – small businesses, Navy and Marine Corps warfighters, and the defense industrial base. The needs of the acquisition, sustainment, and operations communities drive the program. Through sound topic development backed by multi-year fiscal planning and programming, Navy and Marine Corps SYSCOMs select and fund proposed innovative solutions to meet those needs. The result – over time – is a significant return on investment, proven by DoN's increasing Phase III commercialization statistics.

### Data Sources and Management

Phase I and Phase II proposal data was downloaded from the Office of the Under Secretary of Defense for Research and Engineering (OUSD(R&E)) Defense SBIR/STTR Innovation Portal (DSIP). Awarded contracts were tracked using a CAC-enabled internal database. Period of performance, types and sources of funding, and obligation transactions are sourced from original contract documents and/or federal databases. Validated Phase I/II data is reported to DoD on a quarterly basis and subsequently uploaded to the SBA's database at [www.sbir.gov](http://www.sbir.gov). Phase III data is reconciled using a combination of Federal Procurement Data System-Next Generation (FPDS-NG) data and DoN internal commercialization records. FPDS-NG data only reflects federally funded and contracted actions.

State	New Phase I Proposals	Phase I Awards*	Phase I Funding*	Phase II Awards*	Phase II Funding*	Phase III Actions	Phase III Dollars
AK	1	0	\$0.00	0	\$0.00	1	\$119,594.86
AL	72	17	\$2,908,751.60	5	\$3,872,027.00	1	\$7,012,245.83
AR	3	0	\$0.00	0	\$0.00	0	\$0.00
AZ	50	10	\$1,917,698.00	9	\$7,910,296.00	2	\$2,269,862.16
CA	326	64	\$10,878,788.36	52	\$44,480,811.00	80	\$237,878,179.77
CO	79	14	\$2,464,853.00	8	\$6,665,134.00	2	\$7,110,717.55
CT	21	3	\$619,461.00	1	\$450,000.00	2	\$1,187,172.00
DC	11	1	\$140,000.00	0	\$0.00	6	\$21,729,404.50
DE	9	0	\$0.00	2	\$1,499,996.00	0	\$0.00
FL	102	9	\$1,470,861.05	10	\$9,471,529.00	5	\$9,967,272.11
GA	15	3	\$415,422.00	0	\$0.00	1	\$996,702.64
HI	26	4	\$559,525.50	5	\$3,825,430.00	6	\$25,324,121.49
IA	1	0	\$0.00	0	\$0.00	0	\$0.00
ID	5	1	\$139,935.00	2	\$1,351,776.00	0	\$0.00
IL	34	7	\$985,747.19	3	\$2,201,939.00	0	\$0.00
IN	16	1	\$238,087.00	1	\$749,321.00	1	\$1,100,796.00
KS	1	0	\$0.00	0	\$0.00	1	\$6,685,358.47
KY	11	1	\$239,999.99	0	\$0.00	2	\$886,607.00
LA	16	2	\$279,767.00	3	\$8,142,512.00	1	\$153,397.46
MA	227	61	\$9,746,229.91	32	\$27,489,967.84	23	\$43,874,336.43
MD	81	13	\$2,117,576.00	11	\$12,351,254.00	25	\$39,131,615.17
ME	2	0	\$0.00	0	\$0.00	1	\$408,000.00
MI	45	7	\$1,279,387.00	6	\$5,897,816.91	2	\$7,207,205.00
MN	10	2	\$279,871.00	1	\$500,000.00	4	\$19,917,588.01
MO	12	2	\$386,291.00	0	\$0.00	0	\$0.00
MS	1	0	\$0.00	0	\$0.00	8	\$19,669,566.14
MT	2	1	\$239,888.00	0	\$0.00	0	\$0.00
NC	38	6	\$939,705.16	9	\$6,981,786.00	4	\$1,097,482.00
ND	1	0	\$0.00	0	\$0.00	0	\$0.00
NE	2	0	\$0.00	2	\$2,899,493.00	0	\$0.00
NH	21	7	\$979,636.30	2	\$1,391,744.00	11	\$15,571,712.83
NJ	35	5	\$699,945.87	3	\$1,929,080.00	11	\$6,431,237.67
NM	22	4	\$557,531.00	3	\$2,293,655.00	0	\$0.00
NV	5	1	\$140,000.00	0	\$0.00	0	\$0.00
NY	53	16	\$2,433,960.72	8	\$5,205,628.00	2	\$25,279,583.86
OH	94	19	\$2,791,378.00	6	\$5,374,189.00	21	\$81,337,793.29
OK	3	1	\$139,167.00	0	\$0.00	1	\$1,396,525.00
OR	7	2	\$479,905.00	3	\$2,399,702.00	0	\$0.00
PA	91	17	\$3,011,227.00	13	\$11,460,994.00	15	\$21,206,103.98
RI	19	5	\$712,982.00	0	\$0.00	18	\$4,654,333.34
SC	14	0	\$0.00	1	\$1,199,241.00	4	\$2,916,403.82
SD	8	1	\$140,000.00	0	\$0.00	4	\$3,601,749.94
TN	13	1	\$236,291.00	1	\$599,990.00	0	\$0.00
TX	121	26	\$4,241,107.08	7	\$3,599,989.00	0	\$0.00
UT	24	4	\$666,138.00	4	\$3,919,114.00	4	\$5,580,651.50
VA	162	39	\$6,601,151.00	23	\$18,579,436.26	110	\$431,321,084.37
VT	3	0	\$0.00	0	\$0.00	0	\$0.00
WA	16	4	\$755,851.00	4	\$3,398,894.70	3	\$22,468,104.73
WI	6	1	\$140,000.00	2	\$1,832,386.00	0	\$0.00
WV	5	0	\$0.00	1	\$299,952.00	0	\$0.00
WY	6	1	\$139,998.00	0	\$0.00	0	\$0.00
<b>TOTAL</b>	<b>1,948</b>	<b>383</b>	<b>\$63,114,113.73</b>	<b>243</b>	<b>\$210,225,083.71</b>	<b>382</b>	<b>\$1,075,492,508.92</b>

\* - Data only reflects new award counts and amount of funding applied to them.



State	AK	AL	AR	AZ	CA	CO	CT	DC	DE	FL	GA	HI	IA
Phase I	\$0.0M	\$2.809M	\$0.0M	\$1.816M	\$12.272M	\$2.865M	\$0.72M	\$0.14M	\$0.1M	\$2.067M	\$0.515M	\$0.759M	\$0.0M
Phase II	\$0.0M	\$7.463M	\$0.0M	\$13.257M	\$68.271M	\$15.264M	\$3.443M	\$0.0M	\$1.5M	\$13.554M	\$1.481M	\$7.825M	\$0.0M
Phase III	\$0.12M	\$7.012M	\$0.0M	\$2.27M	\$237.917M	\$7.111M	\$1.187M	\$21.729M	\$0.0M	\$9.967M	\$0.997M	\$25.324M	\$0.0M
<b>Total</b>	\$0.12M	\$17.284M	\$0.0M	\$17.343M	\$318.46M	\$25.239M	\$5.35M	\$21.869M	\$1.6M	\$25.588M	\$2.993M	\$33.908M	\$0.0M
State	ID	IL	IN	KS	KY	LA	MA	MD	ME	MI	MN	MO	MS
Phase I	\$0.14M	\$1.285M	\$0.338M	\$0.098M	\$0.24M	\$0.28M	\$10.544M	\$2.118M	\$0.0M	\$1.38M	\$0.38M	\$0.386M	\$0.0M
Phase II	\$1.352M	\$6.49M	\$3.072M	\$0.0M	\$0.5M	\$8.744M	\$59.777M	\$19.81M	\$1.0M	\$12.191M	\$2.028M	\$0.225M	\$0.0M
Phase III	\$0.0M	\$0.0M	\$1.101M	\$6.685M	\$0.887M	\$0.153M	\$43.874M	\$39.144M	\$0.408M	\$7.207M	\$19.918M	\$0.0M	\$19.67M
<b>Total</b>	\$1.492M	\$7.776M	\$4.51M	\$6.784M	\$1.627M	\$9.177M	\$114.196M	\$61.072M	\$1.408M	\$20.778M	\$22.325M	\$0.612M	\$19.67M
State	MT	NC	ND	NE	NH	NJ	NM	NV	NY	OH	OK	OR	PA
Phase I	\$0.14M	\$1.24M	\$0.0M	\$0.0M	\$1.179M	\$1.299M	\$0.657M	\$0.14M	\$2.833M	\$3.189M	\$0.139M	\$0.579M	\$3.111M
Phase II	\$0.0M	\$11.707M	\$0.0M	\$3.599M	\$3.163M	\$9.556M	\$4.184M	\$0.0M	\$11.122M	\$10.934M	\$0.0M	\$2.924M	\$22.168M
Phase III	\$0.0M	\$1.097M	\$0.0M	\$0.0M	\$15.572M	\$6.458M	\$0.0M	\$0.0M	\$25.28M	\$73.915M	\$1.397M	\$0.0M	\$21.219M
<b>Total</b>	\$0.14M	\$14.044M	\$0.0M	\$3.599M	\$19.914M	\$17.313M	\$4.841M	\$0.14M	\$39.235M	\$88.039M	\$1.536M	\$3.502M	\$46.498M
State	RI	SC	SD	TN	TX	UT	VA	VT	WA	WI	WV	WY	All States
Phase I	\$0.713M	\$0.0M	\$0.14M	\$0.138M	\$4.438M	\$0.865M	\$7.776M	\$0.0M	\$0.856M	\$0.34M	\$0.0M	\$0.14M	\$71.165M
Phase II	\$2.069M	\$1.999M	\$0.3M	\$1.095M	\$12.008M	\$4.43M	\$46.419M	\$1.498M	\$4.081M	\$1.832M	\$0.799M	\$0.541M	\$403.674M
Phase III	\$5.06M	\$2.916M	\$3.602M	\$0.0M	\$0.0M	\$5.581M	\$431.33M	\$0.0M	\$22.468M	\$0.0M	\$0.0M	\$0.0M	\$1,068.575M
<b>Total</b>	\$7.842M	\$4.915M	\$4.042M	\$1.233M	\$16.446M	\$10.876M	\$485.525M	\$1.498M	\$27.405M	\$2.172M	\$0.799M	\$0.681M	\$1,543.415M

SYSCOM	Phase I				Phase II				Phase III		
	Proposals	New Awards	New Funding	All Funding	Proposals	New Awards	New Award Funding	All Funding	New Awards	New Award Funding	All Funding
<b>MCSC</b>	129	24	\$3,881,969	\$3,680,864	0	6/1*	\$6,480,904	\$12,282,545	2	\$1,562,919	\$63,045,676
<b>NAVAIR</b>	344	71/30*	\$17,267,858	\$19,656,045	27	76/11*	\$62,352,014	\$137,493,958	13	\$54,236,005	\$361,173,254
<b>NAVFAC</b>	48	3	\$519,814	\$419,856	1	2	\$1,498,662	\$1,998,720	3	\$7,711,059	\$7,711,059
<b>NAVSEA</b>	652	81/12*	\$13,217,291	\$18,080,897	14	56/8*	\$57,222,846	\$102,130,644	18	\$82,779,881	\$504,773,733
<b>NAVSUP</b>	0	0			0	0	0	\$748,291	4	\$13,227,734	\$13,227,734
<b>NAVWAR</b>	98	6	\$1,051,435	\$1,350,687	2	10/3*	\$15,781,756	\$22,791,978	2	\$1,444,000	\$33,951,096
<b>ONR</b>	489	75/35*	\$18,091,139	\$19,489,257	28	35/12*	\$43,503,789	\$84,075,073	11	\$15,183,684	\$35,440,506
<b>SSP</b>	188	46	\$9,084,608	\$8,487,826	0	19	\$17,030,227	\$19,773,743	0	\$0	\$5,467,004
<b>DoN#</b>	0	0		\$3,680,864	0	4	\$6,354,886	\$22,379,274	2	\$43,294,304	\$43,784,804
<b>Navy Total</b>	<b>1,948</b>	<b>306/77 (383)</b>	<b>\$28,227,182.00</b>	<b>\$33,008,634</b>	<b>72</b>	<b>208/35 (243)</b>	<b>\$210,225,084</b>	<b>\$403,674,226</b>	<b>55</b>	<b>\$219,439,586</b>	<b>\$1,068,574,866</b>

\* - SBIR Awards/STTR Awards

# - 'DoN' includes a) Department of Navy-level sponsored Phase I and II awards; and b) Phase III awards made by NAVCENT

	NAVSEA	MCSC	NAVAIR	NAVWAR	ONR	NAVFAC	SSP	Grand Total
<b>22.1</b>	<b>42</b>	<b>3</b>	<b>25</b>		<b>10</b>		<b>10</b>	<b>90</b>
Air Platforms			11		3		1	15
Battlespace Environments	1		1				3	5
Electronics	3		4		3		1	11
Ground / Sea Vehicles	8	2						10
Human Systems	1		1		2			4
Information Systems	5	1	3					9
Materials / Processes	8		3		1			12
Sensors	13				1		4	18
Weapons	3		2				1	6
<b>22.A</b>	<b>7</b>		<b>8</b>		<b>11</b>			<b>26</b>
Air Platforms			6		2			8
Battlespace Environments					3			3
Biomedical					1			1
Electronics	1		1		2			4
Ground / Sea Vehicles	1				1			2
Information Systems	1				1			2
Materials / Processes	1		1					2
Sensors	2				1			3
Weapons	1							1
<b>22.2</b>		<b>3</b>			<b>10</b>		<b>8</b>	<b>21</b>
Air Platforms					1		2	3
Battlespace Environments		1			1		3	5
Biomedical					1			1
Electronics					2		1	3
Ground / Sea Vehicles		1			1			2
Human Systems					1			1
Materials / Processes		1			3		2	6
<b>22.4</b>				<b>2</b>		<b>1</b>		<b>3</b>
Electronics				2				2
Information Systems						1		1
<b>Grand Total</b>	<b>49</b>	<b>6</b>	<b>33</b>	<b>2</b>	<b>31</b>	<b>1</b>	<b>18</b>	<b>140</b>