



Powered by AI-MI<sup>™</sup> and PSF's Expert Analysis

In-depth emerging tech category-by-category trends, use cases, programs/buyers, technologies, companies and regions

Get access today!

# About the SBIR/STTR Report, Dashboard and Data

The SBIR/STTR program, often referred to as "America's Seed Fund", provides almost \$4B in funding for emerging technologies. Other R&D investments also lead to billions more in funding.

This REPORT and accompanying DATASETS and DASHBOARD provide deep insights, by 13 emerging technology areas, on which use cases are being funded, who is investing in them, which companies are winning, and which regions are emerging as the new hotbeds of innovation.

### Who is the report/dashboard/data for:

- SBIR/STTR and Grants teams, to guide overall program design and investment decisions.
- Government innovation and capital managers to understand use cases and technologies being funded and to improve collaboration among programs with similar needs.
- Startups and emerging companies to know how government is investing and identifying program offices.



### 170+ Page Report



### Interactive Dashboard



### Enriched Data on Buyers, Suppliers, Use Cases, Regions



# Emerging Tech Categories/Markets Covered:

- Advanced Communication Technology
- Advanced Energy and Clean Energy Technologies
- Advanced Materials & Related Manufacturing
- Biotechnology & Medical Technology
- Data Storage, Management and Advanced Computing Technologies
- Electronic Warfare Technologies
- Financial Technologies
- Microelectronics
- Natural and Anthropogenic Disaster Prevention or Mitigation
- Quantum Science & Technology
- Robotics, Automation, and Advanced Manufacturing
- Space Technology
- Trusted Al and Autonomy



# The SBIR/STTR report and accompanying dashboard/data are focused on answering several critical questions:

- ✓ Investment trends by 13 critical tech areas and by buyers/suppliers
- ✓ <u>Use cases</u> and which technologies are being used
- ✓ Agencies and program offices investing in which tech areas and use cases
- ✓ Data on over 10,000+ companies that are winning and what capabilities they bring to the market
- ✓ <u>Total investments</u>, including government funded and private capital, by company
- ✓ Geographic regions and innovation clusters emerging across the country



### What Leaders are Saying about the SBIR/STTR Analysis

"This is a <u>terrific report</u>. There are more than a handful of companies that would find this useful."

**Director at Defense Innovation Unit** 

"This is **some of the best work I've ever seen**! Imagine, applying this same analysis to millions, all investments by region and people."

**Executive Director, University of Chicago Center for Impact Sciences** 

"This is **fantastic data**! We certainly would like a briefing."

**SVP of Microelectronics and Advanced Technologies, Large Consortia** 

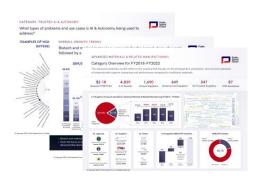
# Get Report, Data, and Customized Analysis



Get access to report, interactive dashboard or <u>validated/enriched and refreshed</u> data. <u>Choose from multiple options</u>.

### 170+ Page Report

Get license to full report including a category-by-category analysis section on 13 emerging tech categories



### Interactive Dashboard

Get access to an interactive visualization dashboard, with over 50 charts and analyses



# Enriched Data on Awards/Buyers/ Suppliers/Regions

30k+ awards. 10k+ companies. program offices data. Get refreshed data, enriched through our Al algorithms, validated by our analysts. Includes over 200 data fields.



Get Assisted Market Intelligence (AMI) Support to customize your data at no additional cost!

Our team will prepare a custom analysis for you with the SBIR data to address your organization's specific needs.

# Report, Data, and Analysis



### Report - What's Included

**170+ page report** includes an overall SBIR/STTR program analysis as well as a category-by-category analysis section on 13 Critical & Emerging Tech (CET)

**Investment Trends** across SBIR/STTR program and by emerging tech category.

Who is buying/investing? Which agencies and programs are investing in which use cases and technologies.

**Who is winning?** Which companies and labs/research institutions, emerging and/or underserved, are winning. Which companies are scaling?

Which use cases are being funded? Improve investment decisions and which technologies are making an impact by understanding how emerging technologies are being used to address critical use cases.

Geographic Clusters & Regional Analysis Identify emerging geographic clusters across the country, for specific technologies and innovations.

See Appendix for examples of analyses or download sample report.

# Report, Data, and/Analysis



### Report - Table of Contents

### SBIR/STTR Program Level Analysis (30+ pages)

- Executive Summary
- Introduction and Methodology
- Definition of Critical Technologies
  - Overall Growth Trend
    - Growth Trend by Phases
    - Growth Trend by Category
    - Growth Trend by Agency
  - Tech and Use Cases
  - Which Agencies are Investing?
  - Which Companies are Winning?
  - Capital Flow Analysis
  - Regional Analysis
    - Statewide Allocation of SBIR/STTR Awards
    - Awards Distribution by MSA(s)
      - SBIR Awards Distribution by MSA(s)
      - R&D Federal Funding by MSA(s)

# Category-by-Category Analysis (140+pages)

- Use Cases and Technologies
- · Growth Trend
  - Growth Trend by Phases
  - Growth Trend by Agency
- Which Agencies/Programs are Investing?
- Which Companies are Winning?
  - Companies by Socio-Economic Designations
- Regional Analysis
  - Statewide Allocation of SBIR/STTR Awards
  - Awards Distribution by MSA(s)

## Report, <u>Data</u>, and/or Analysis



### Data License - What's Included

**Enriched and Validated Data:** Get continuously refreshed data, enriched through our Al algorithms, validated through our Al and Analyst teams. Includes over 200 data fields.

### 30,000+ SBIR/STTR awards by tech area and use cases

Al-enriched data on over 30k awards

- Award details by tech area
- Use cases and tech areas addressed
- Company and Research Institutions
- Award mapping with emerging tech
- Buying Program Offices
- Regional mapping



### 10k+ Suppliers

Al-enriched detail data on 10k+ Suppliers:

- Company descriptions and capabilities
- Company size and demographics
- Products and Offerings
- Experience

### Award data:

- a) Federal contracts
- b) OTA
- c) Grants
- d) Private capital

Suppliers' Information						Experience				
Company Name	Headquarters (Dity/State)	Underserved Status	Specialties and Expertise	Private Capital Investor Name	SBIRJSTTR Awards	Other Federal Contracts	Otte	Grants		
Armoments Research Company, Inc.	Bethesda, MD	sovosa	Al-Powered Predictive Spraces, IniT Spraces, Round Counting, Meapon Line of Sight, Machine Learning		2 \$125K	11 \$16.9M		2 \$1.7M		
ADVR, INC.	Bozeman, MT	Women Duned Business	Frequency Conversion, Phase Modulation, Quantum Devices, Second Harmonic Modulator		2 5246K	46 59.4M		6 52.7M		
Mesodyne Inc.	Somervitie, MA	Women Owned Business	LightCall* Fower Generator Nanophotonic Material	Technisms, Northeader Ventures	2 \$100K	7 52.3M	5 \$1.1M	2 \$1.2N		
X-triave Innovations, Inc	Gaithersburg, MD	sce, wose	Non Destructive Sealing, Machine Learning, Signal/ Image Processing, and Data Analysis, Advanced Material Processing		5 \$1.5M	27 \$5.3M		11 \$6.3M		
TCarta Marine LLC	Denver, CO	wosa	Remate Satellite-Based Hydrospatial Technologies, Ballymetric Data, Seafoor Mapping	NSA Asservator	5399K			4 \$1.5M		
Arorae Corporation	Tampa. Fl.	Veteran Owned Business	Military Tactical Systems, Software and System Engineering		2 \$1.7M	8 \$3.7M				
Control Vision, Inc	Morgantown, WV	sovosa	LauerStrobeltS, Spraycare, Lauer Welding, Metal. Casting		1 \$1.6M	8 \$4.4M		2 \$1.4M		
NEXTGEN FEDERAL SYSTEMS LLC	Morgantown, WV	HLRZsne	Agile Software Development and Integration, Cybersecurity, Madern Systems Engineering, Cloud Mademission		3 \$1.4M	41 598M	1 \$1M	1 5189K		
VERAMINE INC	Bothell, WA	Veteran Owned Business	Cyber Defense, Response Platforms, Contextualized Data		3 \$1.6M	5 \$4M	4 \$189K			
Lunewave Inc	Tucson, AZ	Women Owned Business	Cutting Edge Antonno, Sensor Technology Automotive (ADAS/SW)	Trind Sphere, Union R. (MAY) Nestures, FM Capital, (Novill Capital	1 \$1.7M	2 \$1.796		\$1.494		

### **Program Offices and Buyers data**

- Agencies
- Program Offices
- Use Cases and Tech Focus Areas
- Contact and other pertinent data

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## Report, <u>Data</u>, and/or Analysis

#### Public Spend Forum

### Data Dashboard - What's Included

**Dashboard, organized by critical tech areas,** with interactive filters to help you analyze data in multiple formats

**Growth trends** by Program, Phase, and Category helps to analyze the overall trends of awards by fiscal years in different categories

### "Who's buying?" section

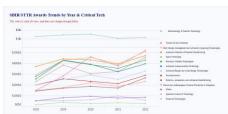
- 1) Funding by category
- 2) Agency drill-down
- 3) Programs

### "Who's winning?" section includes

- 1) Supplier lists
- 2) Supplier profiles

### **Regional Analysis**

Regional views to identify top states and clusters by tech area; which suppliers are winning in specific areas









## Report, Data, and/or Analysis

#### Public Spend Forum

### Customized Analysis through AMI - What's Included

Get data customized and further validated data to answer your specific questions and use cases

# 3 to 5 day sprint to a custom analysis + data; example analyses include:

- For your technology focus area, which use cases are being addressed? Which suppliers are most suitable? Which other programs are involved?
- For your use case, which technologies are being used?
   Which suppliers are most suitable? Which other programs are involved?
- Which companies are most scalable and ready to commercialize?
- For your region, which technology areas are most prominent? Which companies are involved?

Or Customize your questions.

I would recommend the Assisted
Market Intelligence (AMI) to other
DoD applied research communities
seeking knowledge of specific
technology efforts, as well those
desiring significant connections with
game-changers in the field."

Program Manager, Air Force Research Labs Materials Engineering

# **Get Started Today!**



### Report, data purchase options:

- Complete analysis/data across all tech areas
- Select Emerging Technology Category, based on your need and focus
- Buyer/Program Office Data
- Company/Supplier Datasets
- Regional report and dataset

+ Analysis specific to your needs

### Need to customize the data to fit your needs?

We can customize the analysis and dataset based on your needs.

Common requests include:

- Use case or tech specific data
- Agency specific program/buyer data
- Deeper dive into a category
- Region/state specific data

Email us to request a **discount code** (limited time only)!

Contact us at <a href="mailto:support@publicspendforum.net">support@publicspendforum.net</a> for report buying options.



# **APPENDIX**

# Methodology



The focus of this report and analysis is to provide high-level insights BY CRITICAL TECHNOLOGY AREA across agencies, regions, and companies. We will conduct deeper analysis into regions and use cases in subsequent reports.

To conduct this analysis, we utilized:

- Public/Private/PSF-generated and enriched supplier, investor and SBIR datasets that are part
  of AI-MI datasets
- PSF's AI-MI<sup>TM</sup> to enrich data and develop insights into technologies, use cases, and investments
- Critical analysis of the outputs, with an eye toward answering key questions

**Please Note:** <u>This analysis is not an accounting exercise</u>. Our intent is to be 90% directionally correct, which we have achieved based on significant validation of results as well as the validations we conduct as part of our ongoing data management.



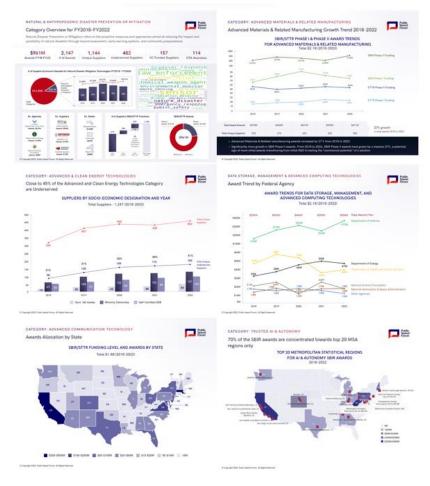
### CATEGORY SPECIFIC ANALYSIS

Dive into a technology category-by-category deep dive, to identify use cases, funding offices, companies, geographic clusters and more.

### 13 Category-by-Category Sections



### Category Dashboards + Analyses





### **USE CASES**

Improve investment decisions and which technologies are making an impact by understanding how emerging technologies are being used to address critical use cases.

Verticals	Aerospace and Defense	Med-Tech and Healthcare	Manufacturing	Energy/ Utilities	IT & Tele – Communication	Space
Examples of Use Cases	Object Detection     Aircraft Parts     Manufacturing/     Assembly     High-Speed     Testing     Intelligence,     Surveillance,     Reconnaissance     Air Traffic     Management     Mission & Strike     Planning     Predictive     Maintenance	Drug/Vaccine     Development     3-D Printing of     Medical Devices     Pain Management     Clinical Monitoring     Gene Therapy     Biomolecular     Imaging     Image Processing     Prosthetics Design     X Tissue     Engineering     Remote Patient     Monitoring	Machine-Machine Communication     Industrial & Smart Factory Automation     Precision Microfabrication     Manufacturing System Health Monitoring     Materials Design and Processing Development     Warehouse Automation	Energy Storage     Optimization     Anomaly & Fault     Detection and     Diagnosis     Remote Area     Electrification     Reduced     Greenhouse Gas     Emission     Energy     Consumption     Pattern Analysis     Building Energy     Calibration	Wireless     Communication     Encrypted Military     Communication     Real Time     Detection and     Classification     Spectrum     Measurement and     Analysis     Multi-Domain     Network     Connectivity     Low Latency     Network Capacity	Space Situation Awareness     Rendezvous & Proximity Operations     Space Debris Mitigation & Tracking     Satellite Communication     On-Orbit Servicing     In-Space Manufacturing
Examples of Technologies Being Tested	Al & Machine Learning     Embedded Cyber- Systems     Threat Detection Sensors     Immersive Technologies     RADAR/LIDAR/ SONAR     Robotics and Autonomous Systems	Wearable Technology     Biosensors     Deep Learning & Computer Vision     Digital Health Solutions     Monoclonal Antibodies     Genetic Markers     Additive Manufacturing     Nanotechnology	3-D Printing     Robotics and Automation     Photolithography     Inkjet Printing     Advanced Manufacturing Software     Internet of Things     Blockchain, RFID, & Advanced Analytics     Augmented & Virtual Reality	Energy Storage     Systems     Smart Grid & Grid     Modernization     Energy Efficiency     Management     System     Decentralized     Energy Generation     & Storage     Technologies     Renewable Energy     Technologies	Human Machine Interfaces     Software Defined Networking     DevOps and Continuous Integration/Cont. Deployment     5G/6G Cellular Technology     Natural Language Processing	Antennas,     Transmitters, and     Signal Processing     Technologies     Quantum     Computing     Navigation &     Control System     Advanced     Manufacturing     Technologies     Data Processing &     Advanced Analytic



### **GOVERNMENT PROGRAMS**

Identify potential customers. Identify program offices investing in similar use cases and technologies. Improve your ability to collaborate with other programs.

#### **EXAMPLE OFFICES: DEFENSE AGENCIES**



### Department of the Army \$941M

- Combat Capabilities
   Development Command
   Aviation & Missile Center
- U.S. Army Acquisition Support Center
- Army Research Laboratory



### Department of the Navy \$1,823M

- Naval Air Warfare Center Aircraft Division
- Naval Air Systems Command
- Naval Information Warfare Center



#### Department of the Air Force \$3,315M

- AFRL Materials and Manufacturing Directorate
- Air Force Civil Engineer Center-Readiness Lab
- Air Force Research Laboratory Small Business Office



#### DARPA \$581M

- Microsystems Technology Office
- Biological Technologies Office
- Information Innovation Office



### Other Defense Offices \$1,507M

- U.S.Special Operations Command
- Washington Headquarters Services
- Space Development Agency

#### **EXAMPLE OFFICES: OTHER CIVILIAN AGENCIES**



### National Aeronautics & Space Administration \$913M

- · Glenn Research Center
- · Shared Services Center
- Marshall Space Flight Center



### Department of Homeland Security

#### \$87M

- Domestic Nuclear Detection Office
- Countering Weapons of Mass Destruction Office
- DHS Office of Health Affairs



### Department of Health and Human Services

#### \$4,960M

- Centers for Disease Control & Prevention Office of Acquisition Services
- National Institute of Allergy and Infectious Diseases
- National Center for Advancing Translational Sciences



### Department of Transportation

#### \$53M

- Volpe National Transportation Systems Center
- Office of Research, Demonstration & Innovation
- Intelligent Transportation Systems JPO



### Environmental Protection Agency

#### \$26M

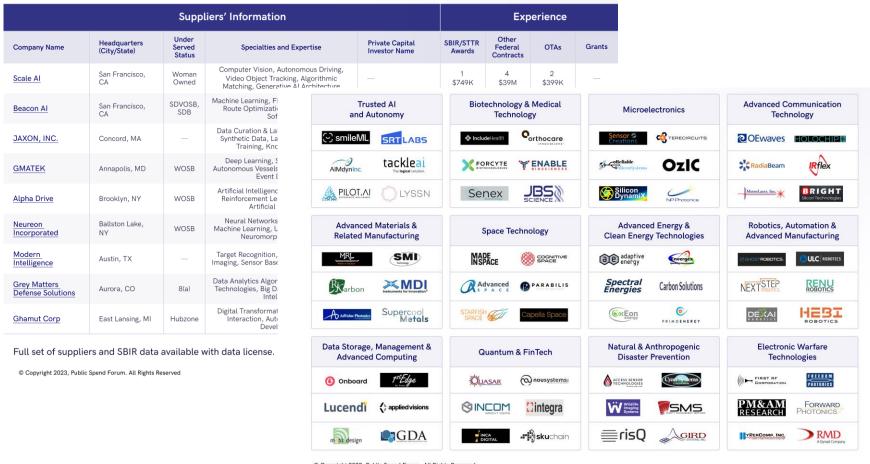
- Office of Research and Development
- Office of Air and Radiation
- · Office of Water

### What's Included



### COMPANIES

Find out which companies, emerging and/or underserved, are winning. Determine which companies are progressing and scaling.

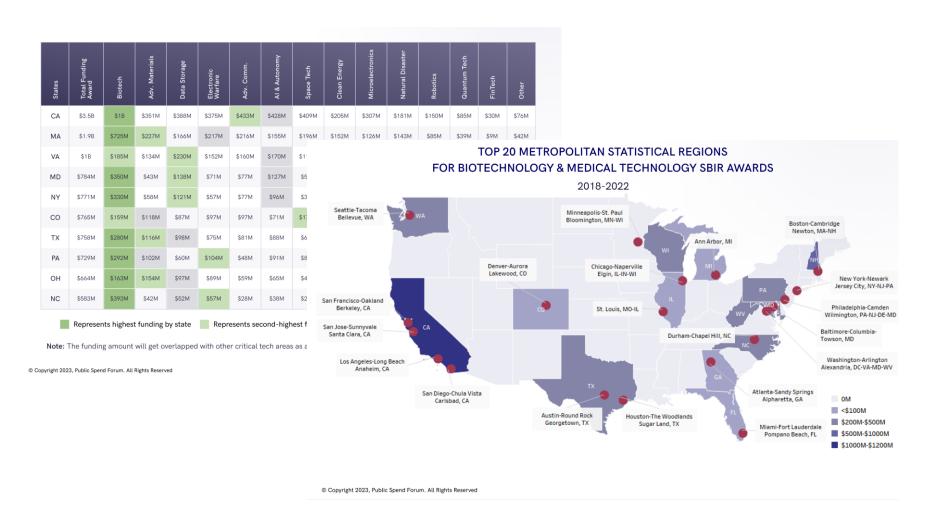


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### **GEOGRAPHIC CLUSTERS**

Identify emerging geographic clusters across the country, for specific technologies and innovations.



# AI-Enabled Market and Supply Chain Intelligence (AI-MI™)

### What We Do:

- ✓ Deep Tech Intelligence
- ✓ Market, Ecosystem and Supply Chain Assessments
- ✓ Supplier Diagnostics and Risk

  Monitoring (in partnership with Resilinc)



- ✓ Market Reports and Insights
- ✓ Datasets and Dashboards
- ✓ Market Research and Advisory Services

