



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 addressing our most pressing challenges.

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 teams and policy makers, to guide overall program design and investment decisions.
- Government innovation 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 and Validated Data**



# 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:

How are investments aligned **by critical tech**?

What <u>use cases and needs</u> are tech investments focused on?

Which <u>agencies and programs are investing in</u> which tech areas and use cases?

Which <u>companies are winning</u> and what capabilities do they bring to the market?

Where are **geographic regions/clusters** emerging across the country?

What <u>types of investments are being</u> commercialized and lead to commercial capital?



# Get Report, Data, Dashboard

Get access to continually refreshed report, interactive dashboard and full report, validated/enriched data.

# 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 interactive visualization dashboard, with over 50 charts and analyses



# **Enriched and Validated Data**

Get refreshed data, enriched through our AI algorithms, validated through our automations as well as by our analysts. Includes over 200 fields of data.





# Report Table of Contents

170+page report includes an overall SBIR/STTR program analysis as well as a category by category section

# 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)



## **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     & 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	AI & 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 Analytics

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### **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

- US 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

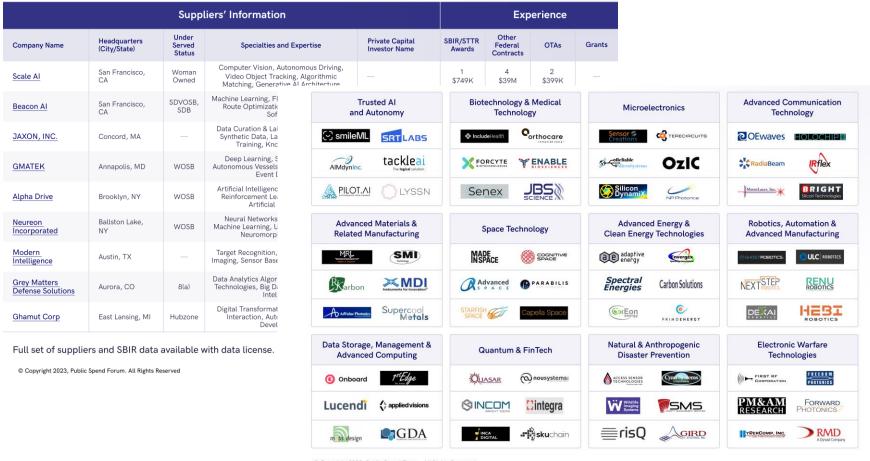
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#### What's Included



## COMPANIES

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



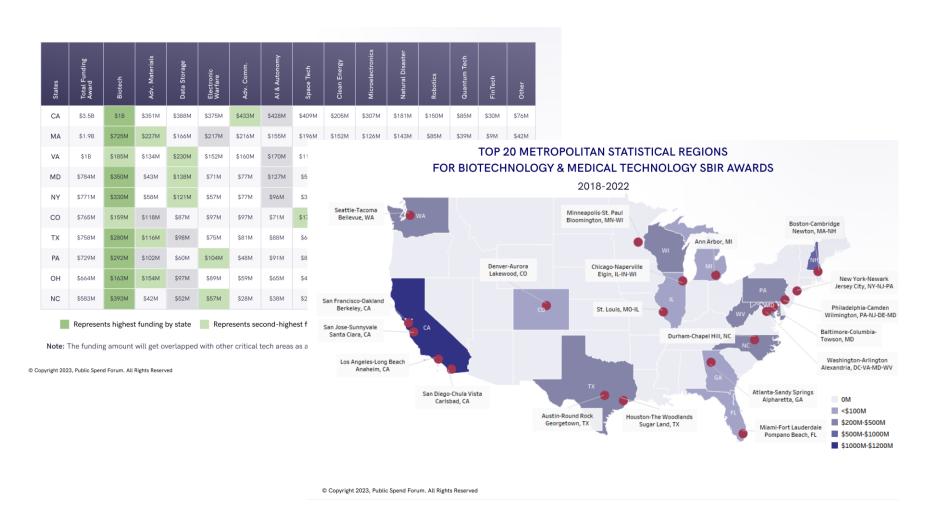
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#### What's Included



## **GEOGRAPHIC CLUSTERS**

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





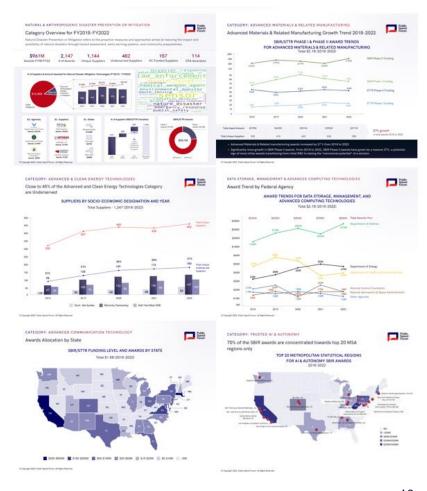
## CATEGORY SPECIFIC ANALYSIS

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





# What Leaders are Saying

This is a terrific report. We're going to share internally. There are more than a handful of companies that would find this useful.

**Director at Defense Innovation Unit** 

This is <u>some of the best work I've ever seen!</u>
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 OTA Manager

# 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 towards 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.

# **Get Started Today!**





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

# Al-Enabled Market Intelligence (Al-MI<sup>TM</sup>)

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Supplier Diagnostics and Risk Monitoring (in partnership with Resilinc)



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