DoD SBIR/STTR
Economic Impact Study

Preliminary Results

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Background

- Largest, most comprehensive SBIR study ever undertaken
  - Nearly 17,000 DoD Phase II SBIR/STTR contracts
    - Start dates FY1995 through FY2012
    - Total award value $14.3B
  - Over 4,400 different companies
    - Many acquired, merged, changed names, or out of business
  - Over 93% of companies (with 95.7% of records) complied with data requests
    - Only 1.8% of companies refused to participate
- Builds on foundation of prior national-level SBIR/STTR studies:
  - ✓ *Air Force SBIR/STTR Economic-Impact Study*, 2000-2013 end dates *(2014)**
  - ✓ *Navy SBIR/STTR Economic-Impact Study*, 2000-2013 end dates *(2016)**

*available for download at SBIR.gov and TechLinkCenter.org

Methodology

- Initial award and contact info from DoD SBIR/STTR awards database
  - Awards verified using CCR, FPDS, DTIC reports, company input
    - Many additions, corrections to total data set
- Team of 12 experienced market and economic research professionals
  - Standardized methodology, with simple, easy questions
    - Continuous team training and group feedback
    - Emphasized courteous approach, minimal time intrusion
    - Encouraged record trading for different perspectives and approaches
- Assurances that financial data will not be shared with public or government
  - Only aggregated financial data is reported
  - Companies may be asked if willing to participate in written or video Success Story
  - Participation may contribute to future of SBIR program

Methodology, *cont.*

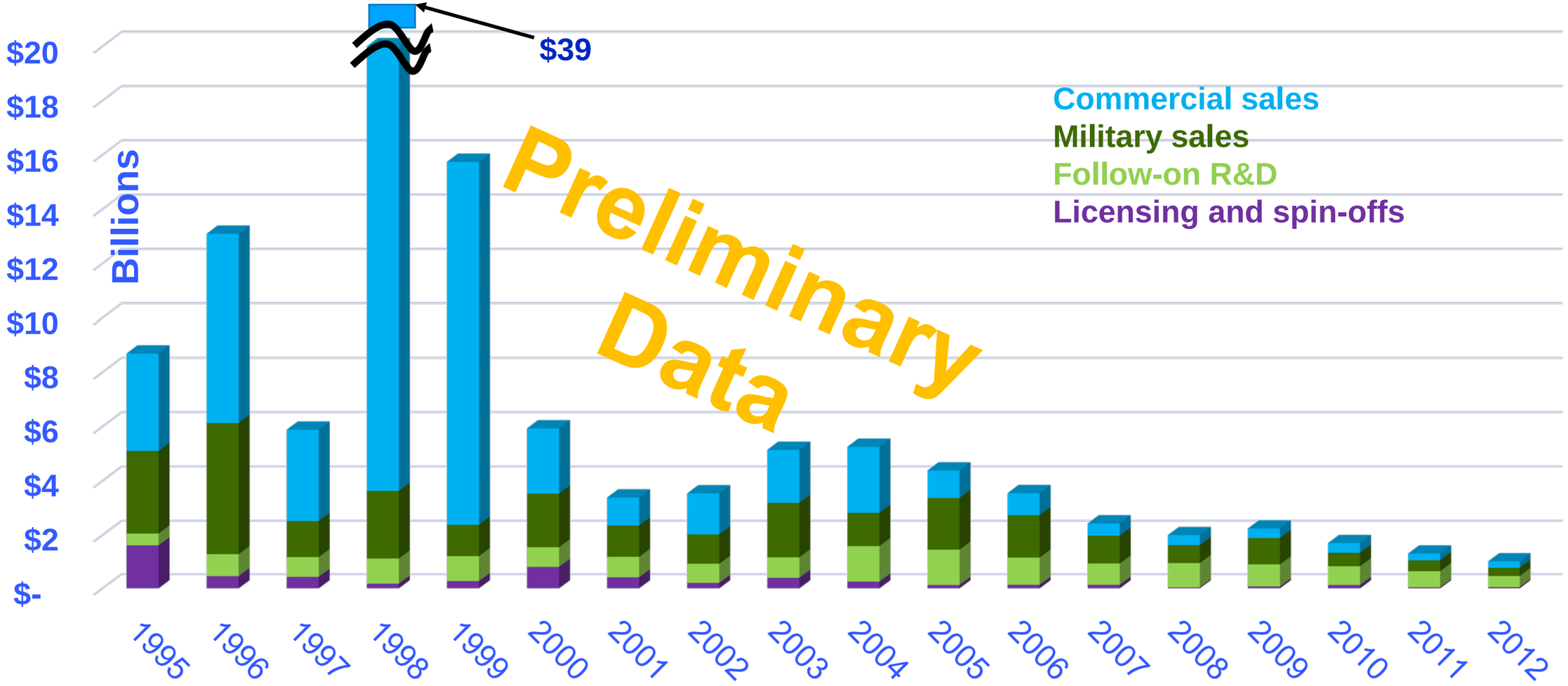
- Basic questions included:
  - Total sales of new products and services (including R&D) related to DoD SBIR/STTR outcomes?
  - Total military sales (direct to US military or via defense Prime Contractors)?
  - Other sales (licensing income, sales by licensees or spin-out companies)?
  - Other economic results (outside investments, spin-out creation, sale of company)?
- University of Colorado economists will analyze survey data using IMPLAN model:
  - Estimate multiplier effects (*direct and induced*) on national economy
    - Total economic output; value added; employment; labor income; tax revenues

Preliminary Results*

- More than 60% of contracts had follow-on economic results
- Total combined sales of $125 billion
  - Military sales total $28 billion
  - Commercial sales total $76 billion
  - Sales numbers are extremely conservative
- Estimated total economic impact of $325 billion
  - Estimated overall ROI 23:1
  - Does not include investments, sale of companies, etc.
- Results by year show accumulating growth of economic impacts

*Prior to final data validation and IMPLAN modeling

Follow-on Revenues by Year of Award



Est. ROI by Year of Award (3-year avg.)

TechLink

DoD SBIR/STTR

Success Story Examples

To view dozens of DoD SBIR/STTR Success Story videos and more, go to:
TechLinkCenter.org : Activities : Economic Impact Studies

Insitu Group Inc.

N94-130 “Development of a Prototype Research Facility for Aerossondes within CIRPAS”
(Center for Interdisciplinary Remotely-Piloted Aircraft Studies)
(N00014-96-C-0115 awarded 9/30/96)

- Led to 1st transatlantic UAV flight
  - Aug. 21, 1998: 26 hrs, 2 gal fuel
- SBIR “instrumental” for NextGen UAVs
  - “100% attributable to this SBIR award”
    - Steve Sliwa, former CEO
- Led to 2008 acquisition by Boeing
- >1 million hours of flight time
- “Single-handedly grew local area out of HUB zone”

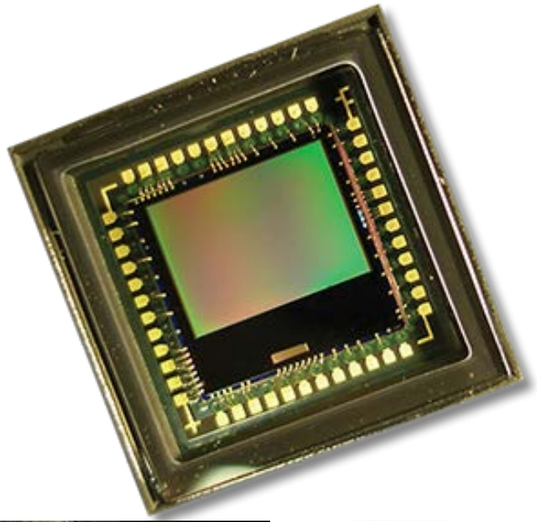
Versatron Corp.

N93-096 “Low Cost Control System Components for Gun Launched Projectiles” (N00178-95-C-3027 awarded 12/15/94)

- High-G Control Actuation System (CAS): 15,000 G’s
- Enabled Excalibur (M982) 155mm precision-guided artillery round with extended range (25 miles)
- Integrated GPS for high precision (5m – 20m CEP), low collateral damage
- Highly successful, next-gen family of projectiles for the U.S. Army and Marine Corps artillery
- Versatron now part of General Dynamics OTS
- GD-OTS has delivered over 10,000 CAS units to Raytheon for Excalibur

Photobit Corp.

BMDO97-003 “Visible CMOS Imager with Ultra High Dynamic Range”
(F33615-97-C-1111 awarded 5/1/97)



- Helped develop CMOS technology now in nearly every cell phone, camera, security system, and newer model vehicle worldwide
  - Spun out of NASA JPL in 1995 with patent licenses
  - Phase II SBIRs from NASA and BMDO in FY1997
  - Army and DARPA Phase II SBIRs in FY1998
  - Acquired by Micron Technology in 2001
  - Co-inventors, founders Drs. Eric Fossum & Sabrina Kemeny noted that the DoD SBIRs focused on performance, were critical to company’s success

“Success has many mothers and fathers” – Eric Fossum 2015

Physical Research, Inc.

SB971-038 “Design of GPS Receiver Module on a Single Silicon Chip” (DAAH01-98-C-R142 awarded 6/11/98)

- Led to Bluetooth and WiFi chips, merged into **Broadcom**, with major share of mobile market
  - PI Reza Rofougaran, fled Iran in 1980s, ‘98 UCLA PhD
  - Founded Innovent Systems (2000) with sister Maryam
  - 2002 Broadcom merger for $440M stock
    - Broadcom co-founder Henry Samueli was Reza’s UCLA mentor
  - Now at Movandi, both named among “Top 5 Technology Innovators” for 2017

Reza: *"This is the only place in the world this could happen. There are no limits, no discrimination for any solid business idea and a person who can implement it.“*

Questions?