



S_{MALL} **B**_{USINESS}

T_{ECHNOLOGY}

T_{RANSFER} **P**_{ROGRAM}

(STTR)

ANNUAL REPORT - FY 2000

Office of Technology
U.S. Small Business Administration

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I Introduction

This is the seventh annual report presented by the U.S. Small Business Administration (SBA) pursuant to Public Law 102-564, the Small Business Research and Development Enhancement Act of 1992.

This report describes the operation and administration of the Small Business Technology Transfer program (STTR) for fiscal year 2000.



Summary of Legislation

Public Law 102-564

Title I of Public Law 102-564 amended the Small Business Act by reauthorizing the Small Business Innovation Research (SBIR) program. After extensive hearings by several committees and review of extensive testimony from numerous experts, Federal Government officials, participating small businesses, beneficiaries, and oversight groups including the General Accounting Office, Public Law 102-564 was passed by the Congress. At the time it was reauthorized, the SBIR program had been in effect for a decade, during which it achieved remarkable success in its program goals of helping small businesses develop important technology and helping keep the Nation at the forefront of technological innovation.

Seeking to further expand small business opportunities in the technical arena, Title II of the Act, established the STTR program.

The STTR program shares the underlying philosophy of the SBIR program. It targets federally funded research and development as a base for technological innovation that will

contribute to the growth and strength of the Nation's economy. It differs from the SBIR program in that STTR awards are made to small businesses that pursue technological innovation *through cooperative research and development with Federal laboratories and non-profit scientific and educational institutions.*

Duration of the Program

In October 1992, Congress enacted Public Law 102-564 authorizing the STTR program for fiscal years 1994, 1995, and 1996. In September 1996, Public Law 104-208 reauthorized the STTR program through FY 1997. Current authority (Public Law 105-135) expires September 30, 2001.

The Small Business Technology Transfer Program



Funding

Federal agencies that participate in the STTR program must have an extramural budget for research or research and development in excess of \$1 billion. Program guidelines established the following percentages of funds an agency could expend with small businesses in connection with the STTR program:

- Not less than 0.05 percent of such budget in fiscal year 1994;
- Not less than 0.1 percent of such budget in fiscal year 1995; and
- Not less than 0.15 percent of such budget in fiscal year 1996, 1997, or thereafter.



Federal Agencies Participating

The five Federal agencies that meet the funding threshold and are participating in the program are:

- Department of Defense
- Department of Energy
- Department of Health and Human Services
- National Aeronautics and Space Administration
- National Science Foundation



The Three-Stage STTR Process

Public Law 102-564 structured the STTR program as a three-phase process designed to identify and nurture promising research and development interests within the small business community. These phases are:

Phase I: Awards are made to determine, to the extent possible, the scientific, technical, and commercial merit and the feasibility of ideas submitted. Phase I awards generally will not exceed \$100,000 and are for a 1-year effort. Award amounts are set at the discretion of the participating agencies.

Phase II: In Phase II, Phase I projects with the most potential may be funded to further develop ideas to meet particular program needs. Phase II awards will generally not exceed \$500,000 for a 2-year effort. Specific amounts awarded are at the discretion of the awarding agencies.

Phase III: No Federal STTR funds are expended during this phase. In Phase III, program participants pursue commercial applications of the innovations developed in Phases I and II. However, in Phase III, program participants may receive additional non-STTR Federal funds to develop products and services for use by the Federal Government. They may also receive awards from non-STTR Federal funding sources for continuation of competitively selected research and research and development.



Eligibility for Participation in STTR

The STTR program involves cooperative research and development performed jointly by a small business and a research institution. Thus, each STTR project involves at least two partners, each of which must meet eligibility

criteria in order for the project to be funded.

To be eligible for an STTR award, a *small business* must have no more than 500 employees, be independently owned and operated, not be dominant in the field of operation in which it is proposing, have its principal place of business in the United States, be organized for profit, and be primarily owned by U.S. citizens.

To be eligible for participation in an STTR award, a *research institution* must be a non-profit institution as defined by the Stevenson-Wydler Technology Innovation Act of 1980, or a federally funded research and development center (FFRDC) as identified by the National Science Foundation in accordance with the Office of Federal Procurement Policy Act. Thus, most universities and colleges, non-profit research centers, and Federal Government-owned, company-operated laboratories are eligible.

Small businesses interested in participating in the STTR program are required to find a research institution meeting this definition and to develop a working agreement before proposing to compete for an STTR award.

Distribution of Work

An STTR award is intended to be a true partnership venture for both the small business and the research institution. To ensure such a relationship, the program establishes minimum performance levels for each participant. Public Law 102-564 stipulates that under an STTR award, the small business must perform at least 40 percent of the work, and the research institution must perform at least 30 percent of the work.

Management of STTR Projects

Although the conduct of the project is a cooperative research and development venture, the small business exercises overall management, control, and responsibility for the project.

Participating agencies are required to ensure that the small business manages and controls the funding agreement pursuant to a business plan that provides for the commercialization of the technology being funded.

Continued Use of Federal Government Property

STTR guidelines also direct Federal agencies to allow small businesses that use Federal Government equipment during the conduct of an STTR award to continue to do so for not less than 2 years after the beginning of Phase III.

Model Agreements

Public Law 102-564 directs SBA to establish guidelines for a model agreement to be used by all STTR participating agencies in allocating intellectual property rights and follow-on rights.

Representatives of each of the five participating agencies issued two model agreements: one published by the Departments of Energy and Health and Human Services, and the other published by the Department of Defense, the National Science Foundation, and the National Aeronautics and Space Administration. The SBA approved both model agreements.

Small businesses are required to negotiate agreements with research institutions, but they are not required to use the model agreements. Rather, they

are free to formulate and execute their own agreements or to use the models in whole or in part.



Rights to Data

A major concern of small, innovative firms is that data generated while performing research and development for the Federal Government will be made public. Therefore, STTR legislation stipulates that the program provide for the small business to retain the rights to data it generates while performing in the STTR program. These retention rights remain effective for at least 4 years. The intent of this provision is to authorize the participating agency to protect technical data generated under the STTR funding agreement and to refrain from disclosing such data to competitors of the small business. The statute also stipulates that the agency cannot use the information to produce future technical procurement specifications, thus protecting the participating small business until it has a reasonable chance to seek patent protection, if appropriate.

Therefore, the Policy Directive mandates that, except for program evaluation, participating agencies must protect technical data for at least 4 years from the completion of the project that generated the data. The Federal Government, however, retains a royalty-free license for Federal Government use of any technical data delivered under an STTR funding agreement, whether patented or not.



Follow-On Funding Agreements

Following completion of Federal research and development contracts, it is not unusual for the agency involved to have further requirements that result in a continuation of work. There have been numerous instances in which, following the completion of Phase II of

STTR, agencies had requirements to continue development of an innovation or need to produce a product or service developed under the STTR award. To ensure smooth continuation of this work, protect the commercial rights to the innovation, and continue to employ the expertise of the originating small business, agencies are directed, to the degree practicable, to award any non-STTR, follow-on contracts or grants to the originating small business. To make this process more efficient, participating agencies have been advised that the competition for an STTR award serves as meeting the requirements of the Competition in Contracting Act. This allows the agencies to award non-STTR, follow-on work to the small business without further competition.



Critical Technologies

STTR legislation calls for agencies to give special consideration to broad research topics and to topics that further one or more critical technologies. These technologies are identified by the National Critical Technologies Panel (or its successor). To assist the agencies with this requirement, SBA requested a complete listing of critical technologies from the National Critical Technologies Panel and the Office of the Secretary of Defense. These listings were sent to each participating agency.

Authorities and Responsibilities of the Participants



Participating Agencies

As set forth in Public Law 102-564, the authorities and responsibilities of Federal agencies participating in the STTR program are to:

1. Unilaterally determine categories of projects to be included in its STTR program.
2. Issue STTR solicitations according to a schedule determined cooperatively with the SBA.
3. Unilaterally determine research topics within the agency's STTR solicitations, giving special consideration to broad research areas that further one or more critical technologies as identified by either the National Critical Technologies Panel or the Secretary of Defense.
4. Unilaterally receive and evaluate proposals resulting from STTR solicitations.
5. Unilaterally select awardees for its STTR funding agreements and inform each awardee, to the extent possible, of the allowable expenses under the funding agreement.
6. Administer its own STTR funding agreements.
7. Pay recipients on the basis of progress toward or completion of the STTR funding agreement requirements.
8. Submit an annual report on the STTR program to the SBA and the Office of Science and Technology Policy.
9. Develop a model agreement for approval by the SBA that allocates between small businesses and research institutions intellectual property rights and any rights to carry out follow-on research, development, or commercialization.
10. Develop procedures in consultation with the Office of Federal Procurement Policy and the Office of Federal Government Ethics to ensure that federally funded research and development centers that participate in STTR agreements:
 - A) Are free from organizational conflicts of interest relative to the STTR program.
 - B) Do not use privileged information gained through work performed for an STTR agency or private access to STTR agency personnel in the development of an STTR proposal.
 - C) Use outside peer review, as appropriate.
11. Develop procedures for assessing the commercial merit and feasibility of STTR proposals.



Small Business Administration

Public Law 102-564 designates the SBA as the lead Agency to implement the program, govern its policy, and monitor and analyze its performance. As lead

Agency, the SBA's authorities and responsibilities are to:

1. Develop, coordinate, and issue a Policy Directive for the general conduct of the STTR programs.
2. Assist small businesses in obtaining Federal Government contracts for research and development.
3. Assist small businesses in obtaining benefits of research and development performed under Federal Government contracts or at Federal Government expense.
4. Develop and maintain a source file and an information program to help ensure each qualified and interested small business the opportunity to participate in technology transfer pilot programs involving Federal agencies.
5. Coordinate with participating agencies a schedule for release of STTR solicitations and prepare a master release schedule that maximizes small businesses' opportunities to respond to solicitations.
6. Independently survey and monitor the operation of STTR programs within participating Federal agencies.
7. Report not less than annually to the Congress on the STTR programs of the Federal agencies.
8. Consult, cooperate, perform studies, and make recommendations to Federal Government agencies.
9. Consult with representatives of small business to assist and encourage such firms to undertake joint programs for research and development.



The STTR Program Policy Directive

Public Law 102-564 authorized the SBA to issue a Policy Directive to conduct the STTR Pilot Program within the Federal Government. Before issuing this Policy Directive, the SBA consulted with the heads of the two Federal agencies participating in the formulation of the program: the Commissioner of Patents and Trademarks and the Administrator of the Office of Federal Procurement Policy.

The SBA met with the representatives of each of these organizations, and after significant discussion and modifications, finalized the Policy Directive effective October 1, 1993.

The Policy Directive guides participating agencies in the operation of the STTR programs. It mandates simplified, standardized, and timely solicitations and funding processes. It also directs the participating agencies to reduce regulatory burdens associated with participation in STTR programs. In addition, the directive also provides guidelines for a model agreement to be used by all agencies for allocating intellectual property and other rights between small businesses and research institutions. It also provides procedures to ensure that recipients of STTR awards meet eligibility requirements as small businesses and that they manage and control the performance of the STTR funding agreement.

Finally, the directive instructs the participating agencies to develop procedures to ensure follow-on, non-STTR funding agreements with the small business when appropriate.



Surveying, Monitoring, and Reporting

Pursuant to the legislation, the SBA is required to independently survey and monitor the operation of STTR programs within participating Federal agencies. The law directs SBA to report not less than annually to the Committee on Small Business of the Senate and the House of Representatives and to the Committee on Science of the House of Representatives on the STTR programs of the Federal agencies.

STTR—The Program's 7th Year - FY 2000

Public Law 102-564 provides both general guidance and specific instructions concerning the implementation of the STTR program. To ensure a successful implementation, the law specifically directed several important actions and established completion dates. All mandated actions were implemented in a timely manner.



Solicitation Schedule

STTR policy directs each Federal agency participating in the program to issue STTR solicitations in accordance with a schedule determined cooperatively with the SBA. After approval of SBA's master schedule, these agencies issued solicitations early in fiscal 2000 to invite small business to propose STTR projects.

After approval of its solicitation schedule, each participating agency provided SBA with information necessary to publish a pre-solicitation announcement. The announcements provided interested small businesses with information on forthcoming opportunities in the STTR program, as well as basic information on program requirements, opening and closing dates of solicitations, and agency contact points for further information.

In fiscal year 2000, the participating agencies had the following solicitation periods:

- Department of Defense - December 1, 1999, through April 12, 2000
- Department of Energy – November 29, 1999, through February 29, 2000

- Department of Health and Human Services - January 2000 with closings April 1, August 1 and December 1, 2000
- National Aeronautics and Space Administration - March 1, 2000, through May 10, 2000
- National Science Foundation – March 1, 2000, through June 9, 2000



Award Obligation Requirements

Program policy required participating agencies to expend on STTR awards not less than 0.15 percent of their fiscal year 2000 extramural budget for research and development. In fiscal year 2000, \$66,969,374 should have been obligated program-wide to meet this requirement; however, actual obligations were \$69,845,955 exceeding the requirement by 1.04 percent.



Small-Business Participation

During FY 2000, small businesses submitted 1,196 proposals under the STTR program, including 1,026 Phase I proposals and 170 Phase II proposals. A total of 328 awards were made, including 233 Phase I awards and 95 Phase II awards. Awards were made to 276 small businesses. In FY 2000, total STTR program obligations were \$69,845,955. Small business received \$38,570,251 or 55 percent of total funding. Research institutions received \$25,895,464 or 37 percent.



Minority and Disadvantaged Firm

Of the 276 firms that successfully competed for STTR awards, 25 or 9.1 percent were firms owned by minority or disadvantaged persons. They received \$5,751,975 or 8 percent of the \$69,845,955 total obligated.



Research Institutions

Small businesses interested in participating in the STTR program must find a research institution that meets the program's definition and develop a working agreement before proposing to compete for an STTR award.

The statistics available at the end of the fiscal year indicate that 276 firms collaborated with 360 research institutions. Of contracts and grants awarded during the year, 304 were made to universities and colleges, 15 to federally funded research and development centers, and 40 to other non-profit research institutions. The research institutions were located in 42 states.

FY 2000 STTR Research Institutions

Alabama

University	Alabama A&M University
University	Auburn University
University	University of Alabama
University	University of Alabama at Birmingham
University	Vanderbilt University
University	University of Alabama at Birmingham

Arizona

University	Arizona State University
University	University of Arizona (5)

Arkansas

University	Arkansas State University
University	University of Arkansas

California

FFRDC	Jet Propulsion Laboratory
FFRDC	Lawrence Berkeley National Laboratory
FFRDC	Sandia National Laboratories
Other	Stanford Research Institute
University	San Diego State University
University	Stanford University
University	Univeristy of California
University	University California
University	University of California (8)
University	University of Southern California (4)

Colorado

FFRDC	National Renewable Energy Laboratory
Other	JILA/NIST
University	Colorado State University
University	University of Colorado (2)

Connecticut

University	University of Connecticut (5)
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Delaware

University	Center For Composite Materials
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District of Columbia

Other	American Institutes For Research
University	Catholic University of America
University	George Washington University (2)
University	Georgetown University Medical Center

Florida

University	Florida A&M University
University	Florida Atlantic University
University	University of Central Florida (5)
University	University of Florida (5)
University	University of Miami (2)
University	University of South Florida

Georgia

University	Emory University
University	Georgia Institute of Technology (2)
University	Georgia State University
University	Georgia Tech Research Institute

Idaho

Other	Mountain States Medical Rsch
University	University of Idaho

Illinois

FFRDC	Argonne National Laboratory (3)
Other	Rush-Presby St. Luke's Medical Center
University	Advanced Coating Tech Group,
University	Center For Quantum Devices (2)
University	Illinois Institute of Technology
University	Northwestern University (4)
University	University of Illinois (5)

FY 2000 STTR Research Institutions

Indiana

Other Purdue Research Foundation
University Purdue University (2)
University University of Notre Dame

Kansas

University Kansas State University (2)

Kentucky

University University of Louisville
University Western Kentucky University

Louisiana

University Iowa State University
University Louisiana State University (2)
University Louisiana Tech University
University Tulane University (3)

Maryland

University Johns Hopkins University (6)
University University of Maryland (4)

Massachusetts

FFRDC MIT (5)
Other Beth Isreal Deaconess Meeical Center
Other Brigham and Womens Hospital
Other Worcester Polytechnic Institute
University Boston College
University Boston University (4)
University Harvard University
University MIT
University Massachusetts Institute of Technology
University Northeastern University (3)
University Tufts University
University University of Massachusetts (3)

Michigan

Other Michigan Biotech Institute
University Michigan State University
University University of Michigan (2)
University Wayne State University (2)
University University of Michigan

Minnesota

University University of Minnesota (3)

Mississippi

University University of Mississippi (2)

Missouri

University St. Louis University
University Washington University

Nebraska

University University of Nebraska (2)

Nevada

University University of Nevada Las Vegas

New Jersey

University Princeton University (3)
University Rutgers University (2)

New Mexico

FFRDC Los Alamos National Laboratory (2)
FFRDC Sandia National Laboratories (2)
University New Mexico State University
University University of New Mexico

New York

Other Mayo Clinic
Other Research Foundation for Mental
Other Wadsworth Center (2)
University Alfred University
University Clarkson University

FY 2000 STTR Research Institutions

New York

University Columbia University
 University Cornell University (5)
 University New York University
 University Rensselaer Polytechnic Institute (4)
 University SUNY
 University State University of New York (4)

North Carolina

University North Carolina State University (2)
 University University of North Carolina

North Dakota

University University of North Dakota (2)

Ohio

Other Edison Welding Institute
 Other UDRI
 University Case Western Reserve University
 University Miami University
 University Ohio State University (2)
 University Ohio University
 University University of Cincinnati
 University University of Dayton (2)
 University University of Toledo

Oklahoma

University Oklahoma State University (2)

Oregon

University Oregon State University
 University University of Oregon

Pennsylvania

Other Children's Hospital of Philadelphia
 University Carnegie Mellon University (2)
 University Lehigh University
 University Pennsylvania State University (4)
 University Thomas Jefferson University

Pennsylvania

University University of Pennsylvania
 University University of Pittsburgh (3)

Puerto Rico

University University of Puerto Rico

South Carolina

University Clemson University (2)
 University South Carolina Research Institute

South Dakota

University South Dakota State University

Tennessee

FFRDC Oak Ridge National Laboratory (2)
 University Fisk University
 University University of Tennessee
 University Vanderbilt University (4)

Texas

Other Southwest Research Institute (3)
 University Baylor College of Medicine
 University Rice University
 University Southwest Texas State University
 University Texas A & M University
 University Texas Agricultural Experiment Station
 University University of Texas (2)

Utah

University University of Utah (3)

Vermont

University University of Vermont

Virginia

University Old Dominion University
 University University of Virginia (4)
 12 University VA Polytechnic Institute (2)

FY 2000 STTR Research Institutions

Virginia

University
University
University

Virginia Commonwealth University
Virginia Polytechnic Institute (8)
Virginia Tech Fiber Optics Center

Washington

FFRDC
University
University

Battelle Memorial Institute
University of Washington (6)
Washington State University (2)

West Virginia

University

West Virginia University

Wisconsin

University

University of Wisconsin (2)

Wyoming

University

University of Wyoming (2)

FY 2000 STTR Phase I Awardees

Alabama

Birmingham

Southern Biotechnology Asso.

Huntsville

Analytical Services, Inc.

CFD Research Corporation (2)

Pelham

Gen Pharmaceuticals, Inc.

Alaska

Anchorage

Chenega

Arizona

Scottsdale

Three Rivers Holdings, LLC

Tempe

LSRL

Tucson

Advanced Ceramics Research, Inc. (2)

Materials & Electrochemical Research

Arkansas

Fayetteville

AMDC

California

Atherton

Layton Bioscience, Inc.

Carlsbad

ISIS Pharmaceuticals

Optotek, Inc.

Goleta

Frontier Technology, Inc.

Irvine

EERGC Corporation

Long Beach

Alpha STARCorp

Los Angeles

Agrivax, Inc.

Biokeys, Inc.

Pacific Wave Industries, Inc.

Technology Service Corp.

Marina Del Rey

R & D Laboratories, Inc.

Menlo Park

Kadmus, Inc.

Northridge

Chemat Technology, Inc.

Palo Alto

Clontech Laboratories, Inc.

San Carlos

Point Biomedical Corporation

FY 2000 STTR Phase I Awardees

San Diego

Alliance Pharmaceutical Corp. (3)
Illumina, Inc.
Molsoft, LLC
Selective Genetics, Inc.

San Mateo

Biomimesys, Inc.

Santa Barbara

Mission Research Corp.

Colorado

Boulder

Astralux, Inc.
D.M.T.

Lafayette

Coherent Technologies, Inc. (2)

Longmont

Left Hand Design Corporation

Westminister

Agbio Development, Inc.

Wheat Ridge

TDA Research, Inc.

Connecticut

North Haven

US Nanocorp, Inc.

Delaware

Newark

Astropower, Inc.

Florida

Alachua

Ixion Biotechnology, Inc.

Aventura

Halogenetics

Boca Raton

GeoSyntec Consultants

Cocoa Beach

Quantum Technology Service, Inc.

Jupiter

Argus Photonics Group

Miami

General Oceanics, Inc.
Intelligent Hearing Systems

Orlando

Light Processing & Technologies,

Oviedo

Electrodynamics Associates, Inc.
Zaubertek, Inc.

Palm Bay

Advanced Magnet Lab, Inc.

FY 2000 STTR Phase I Awardees

Winter Park
Florida Maxima Corp.

Georgia

Atlanta
Cermet, Inc.

Chamblee
Microcoating Technologies, Inc. (2)

Gainesville
Computer Source

Mcdonough
Guided Systems Technologies, Inc.

Tucker
Cell Separation Technologies

Hawaii

Honolulu
Oceanit Laboratories, Inc.

Idaho

Moscow
Institute for Physics & Technology, Inc.

Illinois

Chicago
Bernard Technologies, Inc.

De Kalb
Psytec Corporation

Evanston
QuesTek Innovations, LLC

Palatine
Mosaic Imaging Technology

Urbana
CU Aerospace, LLC

Wilmette
MP Technologies, LLC (2)

Indiana

West Lafayette
P.C. Krause & Assoc.

Kentucky

Lexington
Tigen Pharmaceuticals

Louisville
Graphzepp
Ocular Transplantation, LLC

Maryland

Baltimore
Intralix, Inc.

Beltsville
Atec, Inc.

FY 2000 STTR Phase I Awardees

Bethesda

Bio-Brite, Inc.

Columbia

DACCO SCI, Inc.

Ellicott City

Custom Materials, Inc.

Gaithersburg

Technologies & Devices International
Verachem LLC

Rockville

Intelligent Automation, Inc. (3)

Massachusetts

Andover

Physical Sciences, Inc.

Billerica

Aerodyne Research, Inc.
Nutrirx Corporation

Boston

Boston Micromachines Corp.

Boxborough

CYTYC Corporation

Burlington

Alphatech, Inc.

Cambridge

Newton Scientific, Inc.
Pericor Science, Inc.
Zebra Pharmaceuticals, Inc.
Zebra Pharmaceuticals, Inc.

Canton

Organogenesis, Inc.

Chelmsford

Triton Systems, Inc. (2)

Lexington

Speech Technology & Applied Research

Littleton

Boston Nitride Technologies, Inc.

Natick

Busek Co., Inc.

Needham

Beam Technologies, Inc.

Newbury

Biomod Surfaces

Norwood

EIC Laboratories, Inc.
Icet, Inc.

Somerville

Science Research Laboratory, Inc.
Union Biometrica, Inc.

Waltham

Foster-Miller, Inc.
Giner, Inc.

Westborough

Boston Medical Products, Inc.
Carbomer, Inc.

Westwood

Boston Micromachines Corp.

FY 2000 STTR Phase I Awardees

Worcester

Insight Neuroimaging Systems

Michigan

Ann Arbor

IDE Research, LLC
Mechanical Compliance, Inc.
Valutech Corporation

Dexter

Bio Logic Engineering, Inc.

Farmington Hills

Oxyzone Systems, Inc.

Minnesota

Brooklyn Center

Polychrome Medical, Inc.

Eden Prairie

Nonvolatile Electronics, Inc.
SVT Asso., Inc.

Saint Paul

Artemis MRI LLC
Midwest Molecular, Inc.

Missouri

Chesterfield

Innovative Technology Applications

Saint Louis

DNA Polymerase Technology, Inc.

New Jersey

Allentown

Optomechanical Enterprises, Inc.

Edison

Synergy Pharmaceuticals, Inc.

Princeton

Nanonex Corp.
Sensor Unlimited, Inc.

New Mexico

Albuquerque

Adherent Technologies, Inc.
TPL, Inc.
Thor Technologies, Inc.

Kirtland AFB

Thor Technologies, Inc. (2)

Santa Fe

Southwest Sciences, Inc.

New York

Albany

Mohawk Innovative Technology, Inc

Amherst

Gencyte LLC Baird Research Park

Cold Spring Harbor

Genetica, Inc.

FY 2000 STTR Phase I Awardees

Elmsford

Hypres., Inc.

Hawthorne

Acorda Therapeutics

Ithaca

Agave Biosystems, Inc.

Expertology

Grammatech, Inc.

Latham

Crystal IS, Inc.

Sensor Electronic Technology, Inc.

Rush

Isoflux Incorporated

Setauket

Biophotonics Corporation

Stony Brook

Nanoprobes, Inc.

PolyTherm Corp.

Tarrytown

Mojave Therapeutics, Inc.

Troy

Applied Biophysics, Inc.

Utica

Integrated Sensors, Inc.

North Carolina

Belmont

Flying Bridge Technologies

Cary

3tex Engineered Fiber Products (2)

Durham

Triangle Laboratories, Inc.

Raleigh

Nitronex Corp.

Ohio

Athens

Austral Engineering & Software, I

Bay Village

Millennia Ceramics, Inc.

Blacklick

Environmental Energy, Inc.

Cedarville

Applied Sciences, Inc. (3)

Cincinnati

Advanced Wireless & Telecom Corp.

Nova Engineering, Inc.

Dayton

Cornerstone Research Group, Inc.

ISSI

UES, Inc.

Miamisburg

Inorganic Specialists

Orange

ECC

FY 2000 STTR Phase I Awardees

Springfield

Why Not Composites

Troy

Hyper Tech Research Inc.

Oklahoma

Stillwater

Nomadics, Inc.

Oregon

Fairview

Blue Road Research

Portland

National Applied Science

Pennsylvania

Bethlehem

Serenix Pharmaceuticals, Inc.

Fort Washington

Materials Sciences Corp.

Newton

Collagenex Pharmaceuticals, Inc.

Philadelphia

Near Infrared Monitoring, Inc.

Pittsburgh

Agentase, LLC

Prolx Pharmaceuticals LP

Warrington

MEECO Inc

Williamsport

QORTEK, Inc.

Puerto Rico

Mayaguez

A/C Mechanical Services, Co.

Rhode Island

Cranston

Abacus Risk Management

Tennessee

Nashville

Generx, Inc. (2)

Oak Ridge

American Magnetics, Inc.

Texas

Austin

Systems & Materials Research
Xidex Corporation

College Station

Lynntech, Inc.

Dallas

Access Pharmaceuticals, Inc.

FY 2000 STTR Phase I Awardees

Houston

Advanced Resources Internation
Introgen Therapeutics Inc (2)
NanoTechnologies of Texas, Inc.

Utah

Orem

Apollo Light Systems, Inc.

Provo

Bipolar Technologies

Salt Lake City

Cimarron Software, Inc.
Materials & Systems Research, Inc.

Vermont

White River

Concepts ETI Inc.

Virginia

Alexandria

Systems Planning and Analysis

Blacksburg

Aerosoft, Inc.
Luna Innovations, Inc. (5)

Charlottesville

Adenosine Therapeutics, LLC (4)

Christiansburg

NanoSonic, Inc.

Fairfax

Trident Systems, Inc.

McLean

Amron Corporation

Newport News

AMAC International, Inc.

Norfolk

Norfolk Applied Science, Inc.

Richmond

Biocache Pharmaceuticals, LLC

Sterling

Sterling Semiconductor, Inc.

Washington

Bellevue

Ewing Technology Assoc., Inc. (3)

Bothell

New Chemical Entities, Inc.

Seattle

NeoRx Corporation

Woodinville

Sienna Technologies, Inc. (2)
Sonic Concepts, Inc.

West Virginia

Ravenswood

SDR Plastics, Inc.

FY 2000 STTR Phase I Awardees

Wisconsin

Hartland

Midwest R.F., LLC

Madison

Epicentre Technologies Corp

Wyoming

Sheridan

Big Horn Valve

FY 2000 STTR Phase II Awardees

Alabama

Huntsville

SRS Technologies
Time Domain Corp.

Alaska

Anchorage

Imlach Consulting Engineering

Arizona

Tucson

Advanced Ceramics Research, Inc. .

Arkansas

Fayetteville

Invotek, Inc.

California

Canoga Par

Technical Associates

Chico

Makel Engineering, Inc.

Del Mar

Polycomp Technologies, Inc.

Duarte

Phrasor Scientific, Inc.

Irvine

Metrolaser, Inc.

La Jolla

SQM Technology, Inc.

Los Angeles

Hexagon Interactive

Redwood City

Insect Biotechnology, Inc.

San Diego

Integration Partners, Inc.
Seashell Technology, LLC

Santa Barbara

Mission Research Corp.

Santa Clara

Focused Research, Inc.

Santa Ynez

Nova Research, Inc.
Pacific Advanced Technology

Torrance

Intelligent Optical Systems

Colorado

Boulder

Knowledge Analysis Technologies, LLC

Florida

FY 2000 STTR Phase II Awardees

Oviedo

Electrodynamics Associates, Inc.

Georgia

Marietta

Global Technology Connection, Inc.

Illinois

Urbana

CU Aerospace, LLC

Indiana

West Lafayette

P.C. Krause & Assoc.
Seas, LLC

Kansas

Manhattan

Nantek, Inc.

Maryland

Annapolis

Technology Assessment & Transfer, Inc.

Baltimore

Equinox Corp.
In Vitro Technologies, Inc.

Gaithersburg

Antex Biologics, Inc.

Maryland

Gaithersburg

C-Motion, Inc.

Massachusetts

Andover

Physical Sciences Inc

Bedford

Cognition Corp.
Cynosure, Inc.

Belmont

Massachusetts Technological Laboratory

Boston

Intraimmune Therapies, Inc.

Cambridge

Atmospheric & Environmental Research

Lincoln

Psychometrix Assoc., Inc.

Sudbury

Cutanogen, Inc.

Taunton

Kopin Corp.

Waltham

Foster-Miller, Inc.
Metal Matrix Cast Composites, Inc.

FY 2000 STTR Phase II Awardees

Woburn

Cardiotech International, Inc.

Michigan

Lansing

EFX Systems, Inc.

Oxford

Elsohly Laboratories, Inc.

Minnesota

Minneapolis

MSP Corporation

Montana

Butte

Montec Associates, Inc.

New Jersey

Piscataway

Nanopowder Enterprises, Inc.

New Mexico

Santa Fe

Photonic Assoc.

New York

Bronx

Vtec Laboratories, Inc.

Elmsford

Hypres, Inc.

Ithaca

Agave Biosystems, Inc.

Ohio

Cedarville

Applied Sciences, Inc.

Columbus

Weldware, Inc.

Dayton

Spectra Research, Inc.

Hilliard

Syscom Technology, Inc.

Toledo

Receptorpro, Inc.

Oklahoma

Stillwater

Nomadics, Inc.

Oregon

Corvallis

AVI Biopharma

FY 2000 STTR Phase II Awardees

Eugene

On Time Systems, Inc.

Hubbard

Broadacres Nursery, Inc.

Pennsylvania

Dublin

Combustion Research & Flow Technology

Flourtown

Spectrumedix Corporation

Mechanicsburg

Isoperformance, Inc.

Monroeville

RJ Lee Group, Inc.

Rhode Island

East Providence

Evans Capacitor Company

South Dakota

Brookings

Microconversion Tech. Company

Tennessee

Chattanooga

AccuRate Automation Corp. (2)

Knoxville

Environment Engineering Group

Environmental Engineering Group, Inc.

Nashville

Gene Rx, Inc.

Texas

Houston

Nanotechnology Of Texas, Inc.

Utah

Orem

Apollo Light Ssystems, Inc.

Salt Lake City

Echelon Research Laboratories

Vermont

Burlington

Health Sim, Inc.

Virginia

Blacksburg

Adoptech, Inc.

Luna Innovations, Inc. (2)

Lunar Innovations, Inc.

Manassas

Athena Technologies

UTD, Inc.

FY 2000 STTR Phase II Awardees

New Castle

Airak Engineering, Inc.

Roanoke

Plastics One, Inc.

Sterling

Reliable Software Technologies Corp.

Virginia Beach

Oceana Sensor Technologies, Inc.

Washington

Richland

Mesosystems Technology, Inc.

Seattle

Mathsoft, Inc.

Wisconsin

Madison

Metabiologics, Inc.

Wyoming

Laramie

Detection Limit, Inc.

STTR Program Data - Fiscal Year 2000

AGENCY OBLIGATIONS	DOD	NSF	DOE	NASA	HHS	TOTAL
AGENCY EXTRAMURAL BUDGET	20,734,957,210	2,500,000,000	3,340,384,000	3,733,000,000	14,084,000,000	44,392,341,210
AGENCY STTR BUDGET	31,433,774	3,900,000	5,009,600	5,500,000	21,126,000	66,969,374
DOLLARS OBLIGATED	32,914,624	4,745,733	5,109,749	5,500,047	21,575,802	69,845,955
% OF EXTRAMURAL BUDGET	0.16%	0.19%	0.15%	0.15%	0.15%	0.16%
DEFICIT/SURPLUS	1,480,850	845,733	100,149	47	449,802	2,876,581
STTR AWARD PROFILE - COMMITMENTS						
TOTAL PHASE I AWARDS	82	25	18	20	88	233
MINORITY DISAD. PHASE I AWARDS	8	4	2	3	1	18
TOTAL PHASE II AWARDS	55	5	7	8	20	95
MINORITY/DISAD. PHASE II AWARDS	5	0	1	1	0	7
TOTAL PHASE I DOLLARS AWARDED	7,246,794	2,497,807	1,793,095	1,993,673	10,403,342	23,934,711
MIN/DISAD. PHASE I DOLLARS AWARDED	1,254,339	400,000	199,900	299,904	99,984	2,254,127
TOTAL PHASE II DOLLARS AWARDED	25,667,830	2,247,926	3,316,654	3,506,374	11,172,460	45,911,244
MIN/DISAD. PHASE II DOLLARS AWARDED	2,499,362	0	498,486	500,000	0	3,497,848
TOTAL PHASE I & II AWARDED	32,914,624	4,745,733	5,109,749	5,500,047	21,575,802	69,845,955
AVERAGE AMOUNT PHASE I AWARDS (\$)	88,376	99,912	99,616	99,683	118,220	102,724
STTR SOLICITATION PROFILE						
NO. OF SOLICITATIONS RELEASED	1	1	1	1	1	5
NO. OF RESEARCH TOPICS	44	4	45	5	142	240
NO. PHASE I PROPOSALS RECEIVED	349	87	145	82	363	1,026
NO. PHASE II PROPOSALS RECEIVED	69	13	12	23	53	170
RESEARCH INSTITUTION PROFILE						
NUMBER OF PFRDCS	5	1	6	3	0	15
NUMBER OF UNIVERSITIES	119	59	17	22	87	304
NUMBER OF OTHER NON-PROFIT	14	0	2	3	21	40

STTR Program Data - Fiscal Year 2000

	DOD	NSF	DOE	NASA	HHS	TOTAL
COOPERATIVE RESEARCH PROFILE						
TOTAL DOLLARS OF AWARDS	32,914,624	4,745,733	5,109,749	5,500,047	21,575,802	69,845,955
DOLLARS TO SMALL BUSINESS	20,164,444	2,812,550	3,361,460	3,855,427	8,376,370	38,570,251
DOLLARS TO RESEARCH INSTITUTION	11,512,194	1,933,183	1,859,976	2,137,527	8,452,584	25,895,464
NO. OF AWARDS TO UNIVERSITIES	119	59	17	22	87	304
DOLLARS TO UNIVERSITIES	9,566,553	1,898,183	1,309,408	1,635,291	6,794,596	21,204,031
NO. OF AWARDS TO FFRDCS	5	1	6	3	0	15
DOLLARS TO FFRDCS	269,072	35,000	479,946	380,556	0	1,164,574
NO. OF AWARDS TO OTHER NON-PROFITS	14	0	2	3	21	40
DOLLARS TO OTHER NON-PROFITS	1,676,569	0	70,622	121,680	1,657,988	3,526,859
PHASE I						
NUMBER OF FFRDC AWARDS	4	1	4	1	0	10
NUMBER OF UNIVERSITY AWARDS	74	24	12	16	70	196
NO. OF OTHER NON-PROFIT AWARDS	5	0	2	3	18	28
TOTAL DOLLARS OF AWARDS	7,246,794	2,497,807	1,793,095	1,993,673	10,403,342	23,934,711
DOLLARS TO SMALL BUSINESS	4,444,990	1,343,300	1,137,257	1,295,887	4,967,699	13,189,133
DOLLARS TO RESEARCH INSTITUTIONS	2,696,633	1,154,507	655,838	697,786	5,409,060	10,613,824
NO. OF AWARDS TO UNIVERSITIES	74	24	18	16	70	202
DOLLARS TO UNIVERSITIES	2,377,850	1,119,507	425,270	545,354	4,182,345	8,650,326
NO. OF AWARDS TO FFRDCS	4	1	4	1	0	10
DOLLARS TO FFRDCS	119,169	35,000	159,946	30,752	0	344,867

NO. OF AWARDS TO FFRDCS	1	0	2	2	0	5
DOLLARS TO FFRDCS	149,903	0	320,000	349,804	0	819,707
NO. OF AWARDS TO OTHER NON-PROFITS	9	0	0	0	3	12
DOLLARS TO OTHER NON-PROFITS	1,476,955	0	0	0	431,273.	1,908,228

FY 2000 dollars obligated include modifications to previous year's awards for DOD (\$4,033,477K) and HHS (\$463,674K)

