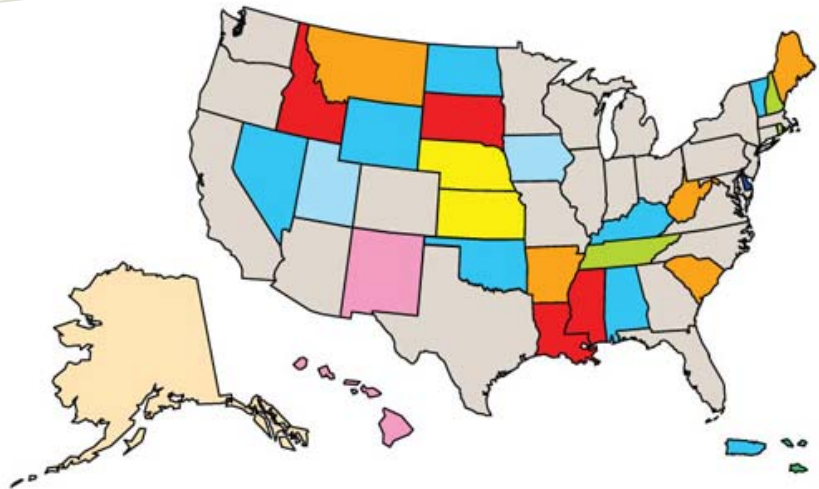


*A SOUND INVESTMENT IN
THE NATION'S FUTURE.*

EPSCoR/IDeA *foundation*

EPSCoR/IDeA In Fiscal Year 2012

Prepared by: EPSCoR/IDeA Foundation
March 2011



BACKGROUND

The Experimental Program to Stimulate Competitive Research (EPSCoR) and the Institutional Development Award (IDeA) Program were established to ensure that the research universities of all states participate in and benefit from federal science and technology (S&T) activities. Six federal EPSCoR/IDeA programs partner with state governments and their research universities to improve the S&T capacity of these institutions. This effort has been highly successful. The federal and state EPSCoR/IDeA investment has created a flourishing research enterprise, and developed extensive scientific and technological expertise. EPSCoR/IDeA states are now home to more than one-fifth of the academic scientists and engineers who are engaged in research activities, and one-quarter of doctoral research universities. These institutions and their faculty represent an important American asset. These S&T resources must be utilized to overcome the current national economic crises and return our country to predominance in world markets.

President Obama and Congress have determined that a crucial component of the economic recovery will be an S&T effort involving all sectors of the economy and all states and regions. EPSCoR/IDeA states' academic scientists and engineers are already working on cutting edge research in energy; defense; climate change; health; transportation; homeland security; and agriculture. This research forms the base for discoveries that ultimately lead to the creation of new high tech businesses and new opportunities for the US workforce. The federal investment in EPSCoR and IDeA programs must be strengthened to ensure that the national research enterprise remains robust in all states and regions as our country works to restore and maintain its S&T supremacy in world markets.

EPSCoR/IDeA involves 27 states and two territories. EPSCoR or IDeA programs exist at six agencies: the National Institutes of Health (where IDeA is located); and the agencies with EPSCoR programs including the National Science Foundation; the National Aeronautics and Space Administration; and the Departments of Defense, Energy, and Agriculture. Agencies use rigorous merit-review processes to guide funding decisions in each of the federal agencies. States and universities that participate in these programs contribute significant funding to the EPSCoR/IDeA effort.

Eligible EPSCoR/IDeA jurisdictions include: Alabama; Alaska; Arkansas; Delaware; Hawaii; Idaho; Iowa; Kansas; Kentucky; Louisiana; Maine; Mississippi; Montana; Nebraska; Nevada; New Hampshire; New Mexico; North Dakota; Oklahoma; Rhode Island; South Carolina; South Dakota; Tennessee; Utah; Vermont; West Virginia; Wyoming; the Commonwealth of Puerto Rico; and the U.S. Virgin Islands.

The EPSCoR/IDeA programs are diverse and innovative, as are the people who conduct them. All programs and researchers contribute to state and national priorities, whether in basic science, engineering, technology and mathematics, health, defense, homeland security, environment, agriculture, space, energy, education, or other essential areas. Bold, strategic, and focused investments in people, tools and ideas are advancing scientific progress and catalyzing innovation across America.

Summary of EPSCoR/IDeA Programs, by Agency

| Agency | Date Enacted | FY10 Enacted | FY12 Goals | # of Eligible States | Types of Support/Award Mechanism |
|-------------|--------------|--------------|-----------------|----------------------|---|
| NSF/EPSCoR | 1979 | \$147.8M | \$167.0M | 29 | <ul style="list-style-type: none"> ◆ Research Infrastructure Improvement Awards ◆ Co-Funding |
| DOD/DEPSCoR | 1991 | \$0.0 | Language | 23 | <ul style="list-style-type: none"> ◆ Basic and Applied Research Grants ◆ Graduate Traineeships ◆ Research Instrumentation |
| DOE/EPSCoR | 1991 | \$22.0M | \$27.0M | 29 | <ul style="list-style-type: none"> ◆ Laboratory-State Partnership Awards ◆ Implementation Grants |
| USDA/EPSCoR | 1991 | \$26.248M | 10% Language | 26 | <ul style="list-style-type: none"> ◆ Research Career Enhancement Awards ◆ Equipment Grants ◆ Seed Grants ◆ Strengthening Standard Research Project Awards |
| NASA/EPSCoR | 1993 | \$25.0M | \$25.0M | 29 | <ul style="list-style-type: none"> ◆ Research Implementation Awards ◆ Research Infrastructure Development Awards |
| NIH/IDeA | 1993 | \$228.862M | \$275.0M | 24 | <ul style="list-style-type: none"> ◆ Centers of Biomedical Research Excellence (COBRE) ◆ Networks of Biomedical Research Excellence (INBRE) ◆ Co-Funding |

**National Science Foundation
NSF EPSCoR**

Cognizant Office Office of Integrative Activities

Program Description NSF EPSCoR, established in 1979, develops and makes the best use of a state’s academic science and technology resources. Its goals are to: a) “provide strategic programs and opportunities for EPSCoR participants that stimulate sustainable improvements in their R&D capacity and competitiveness; and b) advance science and engineering capabilities in EPSCoR jurisdictions for discovery, innovation and overall knowledge-based prosperity.” By improving research infrastructure and increasing the capability of scientists to compete for mainstream programs, NSF EPSCoR is building a high-quality, university-based research and education infrastructure, capable of supporting a strong and stable economic base into the 21st century. NSF EPSCoR works through a State Committee in each of its eligible jurisdictions.

Award Components **Current funding mechanisms** - NSF EPSCoR provides funding support through the following types of awards:

EPSCoR Research Infrastructure Improvement (RII) Awards:

- **Track-1 RII Awards** provide up to \$4 million annually to support academic research infrastructure improvements in R&D areas critical to the state’s long-term S&T competitiveness and economic development. **EPSCoR states and institutions contribute additional funding (20 percent of the total NSF award).**

- **Track-1 awards are the most important investment mechanism in jurisdictions’** research infrastructure development and maintaining their competitiveness.

- **Track-2 RII Awards** provide up to \$2 million dollars per year to support research utilizing cyberinfrastructure. Track-2 awards are multi-jurisdictional and seek to develop regional strengths.

EPSCoR Co-Funding: The goal of co-funding is to accelerate movement of EPSCoR investigators into mainstream NSF research programs. Since 1998, NSF EPSCoR co-funding has enabled more than 2,500 EPSCoR researchers to win funding in the science and education programs at NSF. Co-funding allows the science, engineering, and education programs at NSF to fund more awards to researchers in EPSCoR states by providing partial EPSCoR support for proposals that have been highly rated by the merit review process but for which sufficient funding is not available through the regular process. A portion of the funding for such proposals comes from the EPSCoR program itself and a portion from NSF’s S&E programs.

EPSCoR States* 29 including Puerto Rico and the US Virgin Islands

| <i>FY09 Enacted</i> | <i>FY10 Enacted</i> | <i>FY12 Budget Request</i> | <i>FY12 Goal</i> |
|-------------------------|-------------------------|----------------------------|------------------|
| \$133.0M | \$147.8M | \$160.53 | \$167M |

EIF Liaisons

| | |
|--|---|
| <p><i>Chair, NSF EPSCoR Subcommittee</i> Paul Hill, Ph.D. West Virginia Higher Education Policy Commission</p> | <p><i>Staff</i> Carolyn Fuller cfuller@vsadc.com</p> <p>Jim Hoehn jhoehn@epscorfoundation.org</p> |
|--|---|

* Alabama, Alaska, Arkansas, Delaware, Hawaii, Idaho, Iowa, Kansas, Kentucky, Louisiana, Maine, Mississippi, Montana, Nebraska, Nevada, New Hampshire, New Mexico, North Dakota, Oklahoma, Rhode Island, South Carolina, South Dakota, Tennessee, Utah, Vermont, West Virginia, and Wyoming, and the Commonwealth of Puerto Rico and the U.S. Virgin Islands.

**National Institutes of Health (NIH)
Institutional Development Award (IDeA) Program**

| | |
|----------------------------|---|
| Cognizant Office | National Center for Research Resources (NCRR) |
| Program Description | NIH established the Institutional Development Award (IDeA) program in 1993. IDeA – the largest of the EPSCoR-like programs – is designed to broaden the geographic distribution of NIH funding for biomedical research. As authorized by Congress, the program is intended to enhance the competitiveness for research funding of institutions located in states with historically low levels of funding and low aggregate success rates for grant applications to the NIH. |
| Award Components | <p>Currently, the two core components of IDeA are: 1) Centers of Biomedical Research Excellence (COBRE) program and 2) IDeA Networks of Biomedical Research Excellence (INBRE) program.</p> <p>COBRE: The COBRE program is designed to increase the pool of well-trained investigators in the IDeA states by expanding research facilities, equipping laboratories with the latest research equipment, providing mentoring for promising candidates, and developing research faculty through support of a targeted multi-disciplinary center, led by an established, senior investigator with expertise in the research focus area of the center.</p> <p>COBRE goals are to: 1) develop a thematic scientific focus in an NIH area; 2) engage an established investigator, funded by NIH, NSF or other comparable Federal or private sector source to lead the effort; 3) develop the competitiveness of 3 to 5 research projects, each supervised by a junior investigator; 4) define a plan for mentoring, career development, graduation and replacement of junior investigators; and 5) establish long-term plans for developing and sustaining the center, research program, investigators, collaborations and physical infrastructure.</p> <p>INBRE (formerly BRIN): INBRE increases the pipeline of outstanding students and enhances the quality of science faculty in the IDeA states by networking research intensive and undergraduate institutions. The INBRE program prepares students for graduate and professional schools as well as careers in the biomedical sciences, supports research and mentoring of young investigators, and enhances research infrastructure at participating institutions.</p> <p>INBRE goals are to: 1) develop a statewide, multi-disciplinary thematic research network of doctoral degree granting/research intensive institutions and undergraduate institutions; 2) build and increase research capacity by supporting faculty, fellows, and students at participating institutions; 3) provide undergraduate faculty and students research support, and serve as a “pipeline” to health research careers; 4) provide outreach to students at undergraduate institutions, community colleges and tribal colleges; and 5) enhance the science and technology knowledge base and the economy statewide.</p> |

NIH IDeA

IDeA States*

24 including Puerto Rico

Budget History

| <i>FY09 Enacted*</i> | <i>FY10 Enacted</i> | <i>FY12 Budget Request</i> | <i>FY12 Goal</i> |
|----------------------|---------------------|----------------------------|------------------|
| \$224.043M | \$228.862M | \$230.598M | \$275.0M |

* Apply 1.747% across the board cut - \$216,647,870 post rescission

EIF Liaisons

Chair, NIH IDeA Subcommittee
 Patricia Hand, Ph.D.
 Mount Desert Island Biological
 Laboratory

Staff
 Jessica Malow Jim Hoehn
jmalow@vsadc.com jhoehn@tigdc.com

* Alaska, Arkansas, Delaware, Hawaii, Idaho, Kansas, Kentucky, Louisiana, Maine, Mississippi, Montana, Nebraska, Nevada, New Hampshire, New Mexico, North Dakota, Oklahoma, Rhode Island, South Carolina, South Dakota, Vermont, West Virginia, Wyoming, and the Commonwealth of Puerto Rico.

**Department of Defense
DEPSCoR**

| | | | | |
|----------------------------|--|-------------------------------|--------------------------------------|------------------------------|
| Cognizant Offices | <p>Army Research Office Office of Naval Research Air Force Office of Scientific Research</p> | | | |
| Program Description | <p>Beginning in FY 1992, Congress appropriated funds for the Defense Department’s EPSCoR program (DEPSCoR). This program was authorized in the FY1995 Defense Department Authorization Act (P.L. 103-337) and subsequent years. The program statute for DEPSCoR (section 257 of Public Law 103-337, as amended) states that DEPSCoR’s objectives are to: (1) “enhance the capabilities of institutions of higher education (“universities”) in eligible States to develop, plan, and execute science and engineering research that is competitive under the peer-review systems used for awarding Federal research assistance; and (2) increase the probability of long-term growth in competitively awarded financial assistance that universities in eligible states receive from the Federal Government for science and engineering research.”</p> <p>Beginning in FY 2010, no funds for DEPSCoR have been requested.</p> | | | |
| Award Components | <p>The next stage of a DEPSCoR program that supports meritorious research to assist investigators in participating states would best be accomplished through the DoD University Research Initiative (URI) program. URI is a regular DoD program for which the DEPSCoR-eligible states receive little support. Typical URI awards involve multi-disciplinary multi-university collaborations and would be ideal for the scientific expertise that resides in DEPSCoR jurisdictions and which could help the Department fulfill its S&T mission.</p> | | | |
| Key Issues | <p>DoD had requested no funding for DEPSCoR in FY 2010, FY 2011, and 2012, and plans to terminate the program.</p> <p>The DoD would ensure DEPSCoR states participate in DoD research activities by ensuring that 20% of URI funding occurs in DEPSCoR institutions.</p> | | | |
| DEPSCoR States* | 35 | | | |
| Budget History | <i>FY09 Enacted</i> \$14.833 | <i>FY10 Enacted</i> \$0.0M | <i>FY12 Budget Request</i> \$0.0M | <i>FY12 Goal</i> Language |
| EIF Liaisons | <p><i>Chair, DEPSCoR Subcommittee</i> Peter Alfonso, Ph.D. University of Rhode Island</p> <p style="text-align: center;"><i>Staff</i></p> <p style="text-align: center; color: blue;">TBD</p> | | | |

* Alaska, Arkansas, Delaware, Idaho, Kansas, Kentucky, Louisiana, Maine, Montana, Nebraska, Nevada, New Hampshire, North Dakota, Oklahoma, Puerto Rico, Rhode Island, South Carolina, South Dakota, Tennessee, U.S. Virgin Islands, Vermont, West Virginia, and Wyoming.

Department of Energy
DOE EPSCoR

Cognizant Office

Office of Science

Program Description

The Department of Energy’s Experimental Program to Stimulate Competitive Research (DOE EPSCoR) was established by Section 2203 of the Energy Policy Act of 1992 (P.L. 102-486).

Overview. Positioned within the Office of Science at DOE, DOE EPSCoR assists the Office as the single largest supporter of basic research in the physical sciences in the United States by supporting basic and applied research and development across a wide range of interdisciplinary program areas including: Advanced Scientific Computing Research, Basic Energy Sciences, Biological and Environmental Research, Fusion Energy Sciences, High Energy Physics and Nuclear Physics. Through two principal funding mechanisms, Implementation Grants and EPSCoR-State/National Laboratory Partnership Grants, the goals of DOE EPSCoR are three fold: a) improve the capability of designated states and territories to conduct sustainable and nationally competitive energy-related research; b) jumpstart infrastructure development in designated states and territories through increased human and technical resources, train scientists and engineers in energy-related areas; and c) build beneficial relationships of designated states and territories with the 10 world-class laboratories managed by the Office of Science, leveraging DOE national user facilities and intellectual collaboration. Through broadened participation DOE EPSCoR seeks to provide the most comprehensive network of energy-related research across the nation. DOE EPSCoR supports an average annual budget request of approximately \$8 million per year with Notices for funding opportunities bi-annually.

Award Components

The Program funds basic research in energy-related, programmatic areas through two mechanisms: Implementation Grants, and Laboratory-Partnership Grants.

Implementation Grants fund group research projects for a maximum period of six years with an initial grant period of three years. Fifty percent state matching funds are required.

The **Laboratory Partnership Grants** are for a maximum period of three years. Maximum funding for these grants is \$150,000 per year. Ten percent state matching funds are required. Laboratory Partnership Grants allow EPSCoR researchers to work closely with the DOE National Laboratories to conduct collaborative research and train students.

EPSCoR States*

29 including Puerto Rico

Budget History

| <i>FY09 Enacted</i> | <i>FY10 Enacted</i> | <i>FY12 Budget Request</i> | <i>FY12 Goal</i> |
|---------------------|---------------------|----------------------------|------------------|
| \$17.0M | \$22.0M | \$8.5M | \$27.0M |

EIF Liaisons

Chair, DOE EPSCoR Subcommittee
Phil Boudjouk, Ph.D.
North Dakota State University

Staff
Tom Quinn Jim Hoehn
tquinn@vsadc.com jhoehn@epscorfoundation.org

* Alabama, Alaska, Arkansas, Delaware, Hawaii, Iowa, Idaho, Kansas, Kentucky, Louisiana, Maine, Mississippi, Montana, Nebraska, Nevada, New Mexico, North Dakota, Oklahoma, Rhode Island, South Carolina, South Dakota, Tennessee, Utah, Vermont, West Virginia, Wyoming, Puerto Rico, and U.S. Virgin Islands.

**National Aeronautics and Space Administration
NASA EPSCoR**

| | | | | |
|----------------------------|---|--------------------------------|--|-----------------------------|
| Cognizant Office | Office of Education | | | |
| Program Description | <p>NASA EPSCoR was authorized in 1993 to help develop academic research infrastructure in eligible jurisdictions that historically have not participated fully in competitive research activities, at NASA including space science, earth science, and aerospace technology. NASA EPSCoR is helping states develop an academic research enterprise directed toward long-term, self-sustaining, nationally competitive capabilities. "With partners from academe, industry, and state and local government, NASA's capacity building programs reach wide segments of the population." NASA EPSCoR interfaces with all four of the NASA Mission Directorates: Aeronautics, Exploration Systems, Science, and Space Operations.</p> | | | |
| Award Components | <p>NASA EPSCoR utilizes two primary funding mechanisms: NASA Research Infrastructure Development Cooperative Agreement Awards (RID) and the EPSCoR Research CAN awards. Both components emphasize student education and involvement in research.</p> <p>RID: RID awards enable jurisdictions to build and strengthen relationships with NASA researchers. Awards, which are \$125,000 per year, have a three-year period of performance, with a potential single, two-year renewable continuation. A one-to-one match (cash or in-kind) is required for every NASA dollar awarded.</p> <p>CAN: CAN awards address high-priority NASA research and technology development needs. Awards are up to \$750,000 for a three-year performance period. A one-to-one match (cash or in-kind) is required for every NASA dollar awarded.</p> | | | |
| Key Issues | Program eligibility; new funding mechanism for <i>Implementation</i> awards; limited state participation; budget | | | |
| EPSCoR States* | 28 | | | |
| Budget History | <i>FY09 Enacted</i> \$20.0M | <i>FY10 Enacted</i> \$25.0M | <i>FY12 Budget Request</i> \$9.1 | <i>FY12 Goal</i> \$25.0M |
| EIF Liaisons | <i>Chair, NASA EPSCoR Subcommittee</i> Keith Hudson, Ph.D. Arkansas | | <i>Staff</i> Carolyn Fuller cfuller@vsadc.com | |

* Alabama, Alaska, Arkansas, Delaware, Hawaii, Idaho, Iowa, Kansas, Kentucky, Louisiana, Maine, Mississippi, Montana, Nebraska, Nevada, New Mexico, North Dakota, Oklahoma, Rhode Island, South Carolina, South Dakota, Tennessee, Utah, Vermont, West Virginia, Wyoming, Puerto Rico, and U.S. Virgin Islands.

**United States Department of Agriculture
Strengthening Awards & EPSCoR Program**

| | | | | |
|----------------------------|--|----------------------------------|--|----------------------------------|
| Cognizant Office | National Institute of Food and Agriculture | | | |
| Program Description | USDA Experimental Program for Stimulating Competitive Research (EPSCoR) program is designed to help institutions develop competitive research, education and extension/outreach programs in high-priority areas of national need in agriculture, food, and environmental sciences. Strengthening Awards consist of Sabbatical Grants, Equipment Grants, Seed Grants, and Strengthening Standard Project Awards. Ten percent of the AFRI budget is set aside for strengthening awards and post doctoral fellowships. | | | |
| Award Components | Sabbatical Grants, Equipment Grants, Seed Grants, and Strengthening Standard Project Awards are available during each funding cycle to ensure that researchers at institutions and states that are underrepresented in terms of Federal research, education, and extension/outreach funding receive a portion of AFRI funds. Eligibility for all strengthening categories except Equipment grants includes (a) faculties of small and mid-sized academic institutions that are not among the most successful universities and colleges for receiving Federal funds for science and engineering research (b) Project Directors at degree-granting institutions in USDA Experimental Program for Stimulating Competitive Research (EPSCoR) states, and (c) minority serving institutions. All degree-granting institutions that are not among the most successful in receiving federal science and engineering research funds are eligible for Equipment grants. | | | |
| Key Issues | The EPSCoR states would benefit from modifying the NIFA EPSCoR effort by using the 10% of AFRI funding that is set aside for EPSCoR states, to provide “centers-type” funding with EPSCoR support. This would have net increase in funding for EPSCoR-eligible institutions, since most of the current 10% set aside would be won outright by EPSCoR researchers. Centers awards would have more meaningful impacts. | | | |
| EPSCoR States* | 26 - Every 3 years the NRI determines which states are eligible for USDA EPSCoR funding by determining those that have had a funding level from the NRI no higher than the 38th percentile of all states, based on total funding for the previous 3-year period (excluding strengthening set-aside funds). | | | |
| Budget History | <i>FY09 Enacted</i> \$20.1M | <i>FY10 Enacted</i> \$26.248M | <i>FY12 Budget Request</i> --- | <i>FY12 Goal</i> 10% Language |
| EIF Liaisons | Chair, USDA EPSCoR Subcommittee Tom McCoy, MSU | | Staff Stephanie Roehl sroehl@vsadc.com | |

* Alabama, Alaska, Connecticut, Delaware, Hawaii, Idaho, Kentucky, Louisiana, Maine, Mississippi, Nevada, New Hampshire, North Dakota, Rhode Island, South Carolina, South Dakota, Vermont, West Virginia, Wyoming, American Samoa, District of Columbia, Guam, Micronesia, Northern Mariana Islands, Puerto Rico, and U.S. Virgin Islands.

EPSCoR/IDeA Participating Jurisdictions, by Agency

Different states are eligible for EPSCoR/IDeA programs in each agency, based on eligibility formulas. The chart below shows which states are eligible for which EPSCoR/IDeA programs.

| State | <u>DOD</u> | <u>DOE</u> | <u>NASA</u> | <u>NIH</u> | <u>NSF</u> | <u>USDA</u> |
|----------------|------------|------------|-------------|------------|------------|-------------|
| Alabama | | X | X | | X | X |
| Alaska | X | X | X | X | X | X |
| Arkansas | X | X | X | X | X | |
| Connecticut | | | | | | X |
| Delaware | X | X | X | X | X | |
| Hawaii | | X | X | X | X | X |
| Idaho | X | X | X | X | X | X |
| Iowa | | X | X | | X | |
| Kansas | X | X | X | X | X | |
| Kentucky | X | X | X | X | X | X |
| Louisiana | X | X | X | X | X | X |
| Maine | X | X | X | X | X | X |
| Mississippi | | X | X | X | X | X |
| Montana | X | X | X | X | X | X |
| Nebraska | X | X | X | X | X | |
| Nevada | X | X | X | X | X | X |
| New Hampshire | X | | X | X | X | X |
| New Mexico | | X | X | X | X | X |
| North Dakota | X | X | X | X | X | X |
| Oklahoma | X | X | X | X | X | |
| Puerto Rico | X | X | X | X | X | X |
| Rhode Island | X | X | X | X | X | X |
| South Carolina | X | X | X | X | X | X |
| South Dakota | X | X | X | X | X | |
| Tennessee | X | X | X | | X | |
| Utah | | X | X | | X | |
| Vermont | X | X | X | X | X | X |
| West Virginia | X | X | X | X | X | X |
| Wyoming | X | X | X | X | X | X |
| Virgin Islands | X | X | | | X | X |
| TOTAL | 23 | 29 | 29 | 24 | 29 | 25* |

*Other entities eligible for USDA EPSCoR in FY 2009 include: American Samoa, District of Columbia, Guam, Micronesia, and Northern Mariana Islands.