S. 4047

To establish the Federal Acceleration of State Technologies Deployment Program and for related purposes.

IN THE SENATE OF THE UNITED STATES

DECEMBER 17, 2010

Mr. BENNETT introduced the following bill; which was read twice and referred to the Committee on Commerce, Science, and Transportation

A BILL

To establish the Federal Acceleration of State Technologies Deployment Program and for related purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the “Federal Acceleration of State Technologies Deployment Act of 2009” or the “FAST Deployment Act of 2010”.

SEC. 2. FINDINGS.

Congress finds the following:

(1) Individual States are currently investing approximately $5,000,000,000 annually into new tech-
technology development and deployment to support the local economies in the States and to create jobs, with little or no direct high technology deployment assistance from the Federal Government.

(2) Based on 2 National Centers of Excellence reports, the level of technology deployment investment by States is now more than 10 times the amount of the investment nationwide just a decade ago and State budgets for technology deployment investment are increasing 8 to 10 times faster than State budgets as a whole.

(3) In order to continue the investment by States into the deployment and commercialization of new technologies and innovations under increasingly difficult economic circumstances, it is essential that the Federal Government become a strategic partner in the technology deployment efforts of the States.

(4) The Federal Government is investing less than 2 percent (approximately $2,650,000,000) of the annual Federal budget for research and development budget of $150,000,000,000 into industry for the benefit of small business concerns and the Nation through the Small Business Innovative Research program and the Small Business Technology Transfer program under section 9 of the Small
Business Act (15 U.S.C. 638), to help create innovative products a Federal agency, not the private sector market, has determined are needed.

(5) The Association of University Technology Managers that represents all research universities in the United States recently conducted a survey of 157 major research universities and found the total return on investment on funded research in the form of royalties received back by the universities over a 10-year period was less than 5 percent, meaning, on average, for every $100,000,000 invested in research during the past decade, the aggregate return over that 10-year period is less than $5,000,000.

(6) Most university technologies have been licensed to a limited number of the 3,000 largest manufacturers in the United States representing less than 2 percent of all manufacturers in the United States, while small- and medium-sized manufacturing entities constitute 98 percent of all manufacturing in the United States, and have little to no interaction with research universities or national labs, and research institutions do not have the resources to promote technologies to each of the 300,000 small- and medium-sized manufacturing entities in the United States.
(7) Only about 10 percent of the new technologies and innovations from research universities and national labs are ever licensed for incorporation into commercial private sector products while the remaining 90 percent of new technologies and innovations resulting from such national research and development remain in inventory, completely unlicensed and unused.

(8) Private industry generates 15 to 20 times more patented innovations and technologies each year than structured research universities and Federal labs combined and private industry consistently commercializes about 35 percent of the patented ideas developed by private industry, compared to less than 10 percent from higher education and Federal labs.

(9) The Federal Government should allocate a portion of the total annual Federal research and development budget each year to match funding that individual States are appropriating from their budgets to expand and accelerate the development and deployment of new technologies and innovations through small manufacturing businesses in the United States, which comprise more than 95 percent
of all manufacturing companies in the United States.

SEC. 3. PURPOSES.

The purposes of this Act are—

(1) to establish within the Economic Development Administration the Federal Acceleration of State Technologies Deployment Program or FAST Deployment Program to provide matching funds to qualified States for the acceleration of local commercialization of newly developed technologies and the promotion of small manufacturing and the innovation and deployment of new technologies by small manufacturing enterprises in the United States; and

(2) to establish a national manufacturing technology needs database.

SEC. 4. FEDERAL ACCELERATION OF STATE TECHNOLOGIES DEPLOYMENT PROGRAM.

(a) DEFINITIONS.—In this section.

(1) ASSISTANT SECRETARY.—The term “Assistant Secretary” means the Assistant Secretary of Commerce for Economic Development.

(2) DEPLOYMENT.—The term “deployment”, relating to technology, means—
(A) detailed designing of a new or improved product resulting from a new innovation or technology;

(B) developing production processes, techniques, and methods relating specifically to a new or improved product;

(C) identifying, securing, or developing facilities, equipment, and related supply chain necessary to produce a new or improved product;

(D) developing expertise and training of the employees or contractors necessary to produce a new or improved product; and

(E) developing and implementing marketing activities necessary to introduce a new or improved product into the market place.

(3) EXTRAMURAL BUDGET AND RESEARCH AND DEVELOPMENT.—The terms “extramural budget” and “research and development” have the meanings given those terms in section 9 of the Small Business Act (15 U.S.C. 638).

(4) FAST DEPLOYMENT PROGRAM.—The term “FAST Deployment Program” means the Federal Acceleration of State Technologies Deployment Program established under subsection (b).
(5) FAST DEPLOYMENT PROGRAM FUNDS.—
The term “FAST Deployment Program funds”
means the amounts appropriated to the Assistant
Secretary pursuant to subsection (c)(1).

(6) FAST GRANT FUNDS.—The term “FAST
grant funds” means 94 percent of the FAST De-
ployment Program funds for a fiscal year.

(7) QUALIFIED STATE.—The term “qualified
State” means a State that meets the criteria estab-
lished by the Assistant Secretary under subsection
(d).

(8) SMALL MANUFACTURING ENTERPRISE.—
The term “small manufacturing enterprise” means a
business concern with less than 500 employees in an
industry assigned a North American Industry Classi-
fication System code for manufacturing that is ma-
ajority-owned by citizens of the United States.

(9) STATE.—The term “State” has the mean-
ing given the term in section 3 of the Public Works
and Economic Development Act of 1965 (42 U.S.C.
3122).

(b) ESTABLISHMENT.—The Assistant Secretary shall
establish a Federal Acceleration of State Technologies De-
ployment Program to distribute matching Federal funds
to qualifying States in accordance with this section.
(c) FAST Deployment Program Authority.—

(1) Authorization of Appropriations.—In each fiscal year, there is authorized to be appropriated to the Assistant Secretary of Commerce for Economic Development to carry out the FAST Deployment Program an amount equal to 0.05 percent of the aggregate of the amounts appropriated for that fiscal year for the extramural budgets of all other Federal agencies for research and development.

(2) Matching Grants.—For each fiscal year, the Assistant Secretary shall make grants from FAST Deployment Program funds to qualified States.

(3) Availability.—FAST Deployment Program funds shall remain available to the Assistant Secretary until expended.

(4) Establishment of Manufacturing Technology Database.—The Assistant Secretary shall, in accordance with subsection (k), establish as part of the FAST Deployment Program a national manufacturing technology database.

(d) Qualification for Grants.—The Assistant Secretary shall promulgate regulations establishing cri-
teria for being designated a qualified State, which shall include that—

(1) for the fiscal year before the fiscal year for which a grant under subsection (c)(2) is made (in this paragraph referred to as the “previous fiscal year”), the State funded—

(A) the promotion of manufacturing;

(B) deployment of new technologies and innovations;

(C) the acceleration of new technology deployment; or

(D) the promotion of new product development by small manufacturing enterprises located in the State; and

(2) a State desiring to be designated as a qualified State shall certify for each fiscal year that if the State received funds under the FAST Deployment Program during the previous fiscal year, the State complied with subsection (g) during such previous fiscal year.

(e) DISTRIBUTION OF FUNDS.—

(1) IN GENERAL.—The Assistant Secretary shall make grants using the FAST grant funds to qualified States for making competitive grants to
small manufacturing enterprises to support specific, detailed technology deployment projects.

(2) MINIMUM DISTRIBUTION.—For each fiscal year, the Assistant Secretary shall make available to each qualified State not less than $10,000,000 in FAST grant funds.

(3) REMAINING FUNDS.—Subject to paragraph (4), for each fiscal year, the Assistant Secretary shall distribute the FAST grant funds remaining after the minimum distribution under paragraph (2) to qualified States on a pro rata basis, based on the number of small manufacturing enterprises located in each qualified State.

(4) MAXIMUM DISTRIBUTION.—A qualified State may not receive more than 5 percent of the FAST grant funds available for any fiscal year.

(5) UNDISTRIBUTED FUNDS.—If all FAST grant funds are not distributed to qualified States under paragraphs (1) through (4), the Assistant Secretary may use the undistributed FAST grant funds—

(A) to award grants on a competitive basis to States—

(i) to assist a State that is not a qualified State in developing investment
programs to promote the rapid deployment
of new technologies for manufacturing
within the State; and

(ii) to accelerate the establishment of
the national manufacturing technology
database established pursuant to sub-
section (c)(4); and

(B) for activities of the Economic Develop-
ment Administration that promote and provide
training on implementing manufacturing best
practices and deployment of technology.

(f) USE OF FUNDS.—

(1) IN GENERAL.—A qualified State shall—

(A) use FAST grant funds exclusively to
make grants to small manufacturing enterprises
on a competitive basis for technology deploy-
ment project assistance projects approved by
the qualified State;

(B) allocate FAST grant funds based on
guidelines that the Assistant Secretary shall es-
establish, qualifications established by the quali-
ified State, and the technology needs as assessed
by the Assistant Secretary and the qualified
State;
(C) evaluate applications for grants under the FAST Deployment Program and rank the applications in accordance with the qualifications established by the qualified State and the economic needs and interests of the qualified State; and

(D) make grants from FAST grant funds to the small manufacturing enterprises with the highest scores, determined in accordance with subparagraph (C), for deployment of a technology that is—

   (i) a newly patented technology or a technology for which the small manufacturing enterprise has applied for a patent;

   (ii) a licensed technology from a public research and development institution, a Federal laboratory, or the private sector; or

   (iii) an innovation that, when incorporated into a product, will provide a distinct difference and a substantial benefit, based on an evaluation using a nationally accepted system of business idea evaluation and assessment.
(2) Prohibited uses.—FAST grant funds may not be used by a qualified State or a small manufacturing enterprise receiving a grant under the FAST Deployment Program—

(A) for start-up capital; or

(B) to enhance the availability of venture capital within a State.

(3) Period of availability.—

(A) In general.—A qualified State shall expend FAST grant funds not later than 2 years after the date on which the qualified State receives the FAST grant funds.

(B) Rescission.—Any FAST grant funds not expended by a qualified State during the period specified in subparagraph (A) shall be rescinded.

(g) Matching fund requirements.—For each fiscal year, a qualified State that receives FAST Deployment Program funds shall make available non-Federal funds to carry out the FAST Deployment Program in an amount not less than the total amount of FAST Deployment Program funds received by the qualified State.

(h) Reporting.—

(1) Annual reports by qualified states to assistant secretary.—Each fiscal year, each
qualified State that receives FAST Deployment Pro-
gram funds for a fiscal year shall submit to the As-
sistant Secretary a report describing—

(A) the use of the FAST Deployment Pro-
gram funds by the qualified State during the
fiscal year; and

(B) the benefits to manufacturing within
the qualified State, including the new tech-
nologies and innovations deployed and the jobs
created or retained.

(2) SEMIANNUAL REPORTS BY ASSISTANT SEC-
RETARY TO FEDERAL AGENCIES.—In order to assist
the heads of Federal agencies in carrying out the re-
sponsibilities of such Federal agencies relating to re-
search and development budgeted for under the ex-
tramural budgets of such agencies, the Assistant
Secretary shall, not less frequently than twice each
year, submit to such heads a report on the FAST
Deployment Program.

(i) ADMINISTRATIVE FUNDING.—

(1) IN GENERAL.—The Assistant Secretary
may use not more than 6 percent of the FAST De-
ployment Program funds for a fiscal year for admin-
istrative and project support purposes, in accordance
with this subsection.
(2) **Program Support and Operations.**—

The Assistant Secretary may use not more than 3 percent of the FAST Deployment Program funds for a fiscal year for administration and management of the FAST Deployment Program and other programs of the Economic Development Administration relating to technology innovation and deployment, including—

(A) training of officials of qualified States regarding the operation and management of the FAST Deployment Program, and other programs of the Administration relating to technology innovation and deployment determined appropriate by the Assistant Secretary;

(B) to assist small manufacturing enterprises to secure low interest funding for new or modified facilities and equipment in order to manufacture the products resulting from technology deployment;

(C) providing small manufacturing enterprises receiving a grant under the FAST Deployment Program with uniform guidance relating to strategic and business planning, in accordance with the metrics established under paragraph (3); and
(D) facilitating access for small manufacturing enterprises receiving a grant under the FAST Deployment Program to the metrics established under paragraph (3) to conduct detailed enterprise, product, and staffing assessments.

(3) METRICS.—The Assistant Secretary shall establish a system of metrics to evaluate the performance of the FAST Deployment Program and the participants in such program.

(4) STATES PROGRAM SUPPORT AND OPERATIONS.—

(A) IN GENERAL.—The Assistant Secretary shall make available to qualified States that receive FAST grant funds for a fiscal year 0.9 percent of the FAST Deployment Program funds for the fiscal year for program implementation and management, in accordance with this paragraph.

(B) MINIMUM DISTRIBUTION.—

(i) IN GENERAL.—Except as provided in clause (ii), for each fiscal year, the Assistant Secretary shall make available to each qualified State receiving FAST grant
funds for the fiscal year $300,000 for pro-
gram support and operations.

(ii) MODIFICATION.—The Assistant
Secretary may modify the minimum dis-
tribution under clause (i) for a fiscal year
based on the total amount of FAST De-
ployment Program funds available for the
fiscal year.

(C) REMAINING FUNDS.—Subject to sub-
paragraph (D), for each fiscal year, the Assist-
ant Secretary shall distribute the amounts de-
scribed in subparagraph (A) remaining after
the minimum distribution under subparagraph
(B) on a prorated basis, based on the number
of small manufacturing enterprises located in
each qualified State receiving FAST grant
funds for the fiscal year.

(D) MAXIMUM AMOUNT.—A qualified
State may not receive more than 5 percent of
the total amount made available under subpara-
graph (A) for a fiscal year.

(E) USE OF FUNDS.—Amounts made
available to a qualified State under this para-
graph shall be used for—
(i) soliciting, evaluating, and prioritizing proposals for technology deployment funding from small manufacturing enterprises, consistent with the economic development objectives of the qualified State;

(ii) supporting projects to implement technology deployment; and

(iii) administering the solicitation and evaluation activities of the FAST Deployment Program.

(5) OPERATIONAL SUPPORT.—

(A) IN GENERAL.—For each fiscal year, the Assistant Secretary shall use 1 percent of the FAST Deployment Program funds—

(i) to assess the technology needs of small manufacturing enterprises;

(ii) to maintain a database of all projects receiving funds under the FAST Deployment Program; and

(iii) to develop best practices to refine and to improve the efficiency and effectiveness of the FAST Deployment Program.

(B) GRANTS.—The Assistant Secretary may carry out the requirements of subpara-
graph (A) through the awarding of grants to non-Federal experts.

(j) Coordination With Federal Agencies.—In carrying out the FAST Deployment Program, the Assistant Secretary shall coordinate with the heads of other Federal agencies to ensure the grants made under the FAST Deployment Program are a complement to and enhance the efforts and programs of other Federal agencies to promote and support small manufacturing enterprises in the United States.

(k) Establishment of Manufacturing Technology Database.—

(1) Establishment of National Manufacturing Technology Needs Database.—The Assistant Secretary shall establish a national manufacturing technology database for the purposes of assembling information relating to new manufacturing technologies created throughout the United States to efficiently disseminate the information to manufacturing enterprises within the United States. Such database shall include comprehensive information about patents held by United States persons that are available for licensing and the technology needs of United States manufacturers.
(2) Coordination with existing database.—The Assistant Secretary shall ensure that the database established under paragraph (1) is coordinated with the national manufacturing technology needs database established by the Garn Advanced Manufacturing Business Innovation and Technologies Center to ensure the ongoing maintenance of a national repository for new manufacturing technologies.

(3) Protection of intellectual property.—The Assistant Secretary shall take appropriate measures to protect the intellectual property of participants in the database established under paragraph (1).

(4) Availability.—The Assistant Secretary shall make the database established under paragraph (1) available to—

(A) manufacturers located in the United States that seek new technologies or innovations to improve manufacturing or to promote new manufacturing for the primary purpose of deploying new technologies and innovations developed within the United States to small manufacturing enterprises located in the United States;
(B) National Laboratories, research universities in the United States, and other patent holders in the United States for—

(i) determining if any technologies already developed or under development have potential for filling the technology needs defined in the database;

(ii) identifying technology needs to improve manufacturing in the United States or to introduce new products to small manufacturing enterprises;

(iii) identifying the technology needs of small manufacturing enterprises which might be addressed by technologies or innovations developed or used by other small manufacturing enterprises and that could be licensed or otherwise accessed; and

(iv) promoting the use of patents of such laboratories, research universities, and other patent holders.

(5) ASSESSMENT.—The Assistant Secretary shall—

(A) annually survey not less than 10 percent of small manufacturing enterprises in the
United States to assess the technology needs of small manufacturing enterprises; and

(B) incorporate information from each annual survey under subparagraph (A) into the database established under this subsection, in a manner that appropriately protects confidentiality and intellectual property rights.

(l) REGULATIONS.—The Assistant Secretary shall, in consultation with the States, promulgate regulations for the distribution of FAST Deployment Program funds to all qualified States and the use of FAST Deployment Program funds in accordance with this section.