To encourage and increase the use of crowdsourcing and citizen science methods within the Federal Government to advance and accelerate scientific research, literacy, and diplomacy, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

NOVEMBER 30, 2016

Mr. TONKO (for himself, Mr. MCKINLEY, and Mr. KILMER) introduced the following bill; which was referred to the Committee on Oversight and Government Reform

A BILL

To encourage and increase the use of crowdsourcing and citizen science methods within the Federal Government to advance and accelerate scientific research, literacy, and diplomacy, and for other purposes.

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

2 SECTION 1. SHORT TITLE.

3 This Act may be cited as the “Crowdsourcing and Citizen Science Act of 2016”.

4 SEC. 2. SENSE OF CONGRESS.

5 It is the sense of Congress that—
(1) the authority granted to Federal agencies under the America COMPETES Reauthorization Act of 2010 (Public Law 111–358) to pursue the use of incentive prizes and challenges has yielded numerous benefits;

(2) crowdsourcing and citizen science projects have a number of additional unique benefits, including accelerating scientific research and data acquisition, improving science literacy, and connecting citizens to the missions of Federal agencies; and

(3) granting Federal agencies the direct, explicit authority to use crowdsourcing and citizen science will encourage its appropriate use, including protection of human subjects and other ethical considerations, to advance agency missions and stimulate and facilitate broader public participation in the innovation process, yielding numerous benefits to the Federal Government and citizens who participate in such projects.

SEC. 3. CROWDSOURCING AND CITIZEN SCIENCE.

(a) Definitions.—In this section:

(1) Citizen science.—The term “citizen science” means a form of open collaboration in which individuals or organizations participate in the scientific process in various ways, including—
(A) enabling the formulation of research questions;

(B) creating and refining project design;

(C) conducting scientific experiments;

(D) collecting and analyzing data;

(E) interpreting the results of data;

(F) developing technologies and applications;

(G) making discoveries; and

(H) solving problems.

(2) CROWDSOURCING.—The term “crowdsourcing” means a method to obtain needed services, ideas, or content by soliciting voluntary contributions from a group of individuals or organizations, especially from an online community.

(3) DIRECTOR.—The term “Director” means the Director of the Office of Science and Technology Policy.

(4) FEDERAL AGENCY.—The term “Federal agency”—

(A) except as provided in subparagraph (B), means—

(i) any Executive agency (as defined in section 105 of title 5, United States Code); and
(ii) any military department (as set forth in section 102 of such title); and

(B) does not include any legislative branch agency.

(5) PARTICIPANT.—The term “participant” means any individual or other entity that has consented as a volunteer in a crowdsourcing or citizen science project under this section.

(6) RELATED ENTITY.—The term “related entity” means—

(A) a Federal Government contractor or subcontractor, at any tier; and

(B) a supplier, user, customer, cooperating party, grantee, investigator, fellow, or detailee of a Federal agency.

(b) CROWDSOURCING AND CITIZEN SCIENCE AUTHORIZED.—

(1) IN GENERAL.—The head of each Federal agency, or the heads of multiple Federal agencies working cooperatively, may utilize crowdsourcing and citizen science approaches to conduct activities designed to advance the mission of the respective Federal agency or the joint mission of Federal agencies, as applicable.
(2) **Voluntary Services.**—Notwithstanding section 1342 of title 31, United States Code, the head of a Federal agency may accept, subject to regulations issued by the Office of Personnel Management, voluntary services from participants under this section if such services—

(A) are performed as a part of a crowdsourcing or citizen science project authorized under paragraph (1);

(B) are not financially compensated for their time; and

(C) will not be used to displace any employee of the Federal Government.

(e) **Participation.**—

(1) **Outreach.**—The head of each Federal agency engaged in a crowdsourcing or citizen science project under this section shall make public and promote such project to encourage broad participation of consenting participants.

(2) **Consent, Registration, and Terms of Use.**—

(A) **In General.**—Each Federal agency is authorized to determine the appropriate level of consent, registration, or acknowledgment of the terms of use that is required from participants
in crowdsourcing or citizen science projects on
a per-project basis.

(B) DISCLOSURES.—In seeking consent,
conducting registration, or developing terms of
use for a project under this subsection, a Fed-
eral agency shall disclose the privacy, intellec-
tual property, data ownership, compensation,
service, program, and other terms of use to the
participant in a clear and reasonable manner.

(C) MODE OF CONSENT.—A Federal agen-
cy or Federal agencies, as applicable, may ob-
tain consent electronically or in written form
from participants to the volunteer service terms
of a crowdsourcing or citizen science project au-
thorized under this section.

(3) PROTECTIONS FOR HUMAN SUBJECTS.—
Any crowdsourcing or citizen science project that in-
volves research involving human subjects shall be
subject to part 46 of title 28, Code of Federal Regu-
lations (or any successor regulation).

(4) DATA.—While not neglecting security and
privacy protections, Federal agencies shall endeavor
to make data collected through a crowdsourcing or
citizen science project authorized under this section
open and available, in machine readable formats, to
the public. As part of the consent process, the Federal agency shall notify all participants—

(A) of the expected uses of the data compiled through the project;

(B) if the Federal agency will retain ownership of such data;

(C) if and how the data and results from the project would be made available for public or third party use; and

(D) if participants are authorized to publish such data.

(5) TECHNOLOGIES AND APPLICATIONS.—While not neglecting the intellectual property rights of the Federal Government, Federal agencies shall endeavor to make technologies, applications, code, and derivations of such intellectual property developed through a crowdsourcing or citizen science project under this section open and available to the public.

(6) LIABILITY.—Each participant in a crowdsourcing or citizen science project under this section shall agree—

(A) to assume any and all risks associated with such participation; and

(B) to waive all claims against the Federal Government and its related entities, except for
claims based on willful misconduct, for any in-
jury, death, damage, or loss of property, rev-
venue, or profits (whether direct, indirect, or
consequential) arising from participation in the
project.

(7) SCIENTIFIC INTEGRITY.—Federal agencies
coordinating citizen science projects shall make all
practicable efforts to ensure that participants adhere
to all relevant scientific integrity or other applicable
ethics policies.

(d) MULTISECTOR PARTNERSHIPS.—The head of
each Federal agency engaged in crowdsourcing or citizen
science under this section, or the heads of multiple Federal
agencies working cooperatively, may enter into a contract
or other agreement to share administrative duties for such
activities with—

(1) a for-profit or nonprofit private sector enti-
ty, including a private institution of higher edu-
cation; or

(2) a State, tribal, local, or foreign government
agency, including a public institution of higher edu-
cation.

(e) FUNDING.—In carrying out crowdsourcing and
citizen science activities under this section, the head of
a Federal agency, or the heads of multiple Federal agen-
cies working cooperatively—

(1) may use funds appropriated by Congress;

(2) may publicize projects and accept funds or in kind support for such activities from—

(A) other Federal agencies;

(B) for-profit or nonprofit private sector entities, including private institutions of higher education; or

(C) State, tribal, local, or foreign government agencies, including public institutions of higher education; and

(3) may not give any special consideration to any entity described in paragraph (2) in return for such funds or in kind support.

(f) FACILITATION.—

(1) GENERAL SERVICES ADMINISTRATION AS-
sistance.—The Administrator of the General Serv-
ices Administration, in coordination with the Direc-
tor, shall, at no cost to Federal agencies, identify and develop relevant products, training, and services to facilitate the use of crowdsourcing and citizen science activities under this section, including by specifying the appropriate contract vehicles and technology and organizational platforms to enhance
the ability of Federal agencies to carry out the ac-

tivities under this section to further the policy objec-
tives of the Federal Government.

(2) ADDITIONAL GUIDANCE.—The head of each
Federal agency engaged in crowdsourcing or citizen
science under this section is encouraged to consult
any guidance provided by the Director, including the
Federal Crowdsourcing and Citizen Science Toolkit,
to designate a coordinator for their agency’s
crowdsourcing and citizen science activities, and to
share best practices with other agencies, including
participation of staff in the Federal Community of
Practice for Crowdsourcing and Citizen Science.

(g) REPORT.—

(1) IN GENERAL.—Not later than 2 years after
the date of enactment of this Act, the Director shall
include, as a component of the report required under
section 24(p) of the Stevenson-Wydler Technology
Innovation Act of 1980 (15 U.S.C. 3719(p)), a re-
port on the activities carried out under this section.

(2) INFORMATION INCLUDED.—The report re-
quired under paragraph (1) shall include—

(A) a summary of each crowdsourcing and
citizen science project conducted by any Federal
agency during the most recently completed 2
fiscal years, including a description of the proposed goals of each crowdsourcing and citizen science project;

(B) the participation rates, submission levels, number of consents, or any other statistic that might be considered relevant in each crowdsourcing and citizen science project;

(C) a description of—

(i) the resources (including personnel and funding) that were used in the execution of each crowdsourcing and citizen science project;

(ii) the activities for which such resources were used; and

(iii) how the obligations and expenditures relating to the project’s execution were allocated among the accounts of the Federal agency;

(D) a summary of the use of crowdsourcing and citizen science methods by all Federal agencies, including interagency and multisector partnerships; and

(E) any other information that the Director considers relevant.
(h) SAVINGS PROVISIONS.—Nothing in this section may be construed—

(1) to affect the authority to conduct crowdsourcing and citizen science authorized by any other provision of law; or

(2) to displace Federal Government resources allocated to the Federal agencies that use crowdsourcing or citizen science authorized under this section to carry out a project.