

## Union Calendar No. 319

116TH CONGRESS  
2D SESSION

# H. R. 4979

[Report No. 116-397]

To direct the Director of the National Science Foundation to support STEM education and workforce development research focused on rural areas, and for other purposes.

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### IN THE HOUSE OF REPRESENTATIVES

NOVEMBER 5, 2019

Mr. LUCAS (for himself, Mr. MCADAMS, Mr. BAIRD, Ms. JOHNSON of Texas, Mr. CONAWAY, Ms. KENDRA S. HORN of Oklahoma, Mr. WEBER of Texas, Mr. BALDERSON, Mr. NORMAN, Mr. MURPHY of North Carolina, Mr. COMER, Mr. GONZALEZ of Ohio, and Mr. WALTZ) introduced the following bill; which was referred to the Committee on Science, Space, and Technology

FEBRUARY 13, 2020

Additional sponsors: Mr. MARSHALL, Mr. FOSTER, Ms. ESHOO, Ms. HERRERA BEUTLER, Mr. LAMB, Mr. BABIN, Mr. RODNEY DAVIS of Illinois, Mr. PETERSON, Mr. WITTMAN, Ms. WEXTON, Mr. MOONEY of West Virginia, Mr. PERLMUTTER, Mr. STAUBER, Mr. NEWHOUSE, Mrs. AXNE, Mr. DELGADO, Mr. KIND, Mr. EMMER, Mr. HARDER of California, Ms. SPANBERGER, Mrs. HARTZLER, Ms. SLOTKIN, Mr. DAVID SCOTT of Georgia, Mr. HAGEDORN, Mr. CRAWFORD, Mr. COLE, Mrs. HAYES, Mr. LAMALFA, Mr. DUNN, Mr. GOTTHEIMER, Mr. KHANNA, Mr. COX of California, Mrs. BUSTOS, and Ms. HOULAHAN

FEBRUARY 13, 2020

Reported with an amendment, committed to the Committee of the Whole House on the State of the Union, and ordered to be printed

[Strike out all after the enacting clause and insert the part printed in *italic*]

[For text of introduced bill, see copy of bill as introduced on November 5, 2019]

# **A BILL**

To direct the Director of the National Science Foundation to support STEM education and workforce development research focused on rural areas, and for other purposes.

1        *Be it enacted by the Senate and House of Representa-*  
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4        *This Act may be cited as the “Rural STEM Education*  
5 *Act”.*

6 **SEC. 2. FINDINGS.**

7        *Congress finds the following:*

8            (1) *The supply of STEM workers is not keeping*  
9 *pace with the rapidly evolving needs of the public and*  
10 *private sector, resulting in a deficit often referred to*  
11 *as a STEM skills shortage.*

12            (2) *According to the Bureau of Labor Statistics,*  
13 *the United States will need one million additional*  
14 *STEM professionals than it is on track to produce in*  
15 *the coming decade.*

16            (3) *Many STEM occupations offer higher wages,*  
17 *more opportunities for advancement, and a higher de-*  
18 *gree of job security than non-STEM jobs.*

19            (4) *The 60,000,000 individuals in the United*  
20 *States who live in rural settings are significantly*  
21 *under-represented in STEM.*

22            (5) *According to the National Center for Edu-*  
23 *cation Statistics, nine million students in the United*  
24 *States—nearly 20 percent of the total K–12 popu-*  
25 *lation—attend rural schools, and for reasons ranging*

1        *from teacher quality to shortages of resources, these*  
2        *students often have fewer opportunities for high-quality*  
3        *STEM learning than their peers in the Nation's*  
4        *urban and suburban schools.*

5                *(6) Rural areas represent one of the most prom-*  
6        *ising, yet underutilized, opportunities for STEM edu-*  
7        *cation to impact workforce development and regional*  
8        *innovation, including agriculture.*

9                *(7) The study of agriculture, food, and natural*  
10        *resources involves biology, engineering, physics, chem-*  
11        *istry, math, geology, computer science, and other sci-*  
12        *entific fields.*

13                *(8) It is estimated that by 2020 that there will*  
14        *be a projected one million more computing jobs than*  
15        *applicants who can fill them. To meet this demand,*  
16        *rural students must acquire computing skills through*  
17        *exposure to computer science learning in grades PreK*  
18        *- 12 and in informal learning settings.*

19                *(9) More than 293,000,000 individuals in the*  
20        *United States use high-speed broadband to work,*  
21        *learn, access healthcare, and operate their businesses,*  
22        *while 19,000,000 individuals in the United States*  
23        *still lack access to high-speed broadband. Rural areas*  
24        *are hardest hit, with over 26 percent of individuals*  
25        *in rural areas in the United States lacking access to*

1        *high-speed broadband compared to 1.7 percent of in-*  
2        *dividuals in urban areas in the United States.*

3        **SEC. 3. NATIONAL SCIENCE FOUNDATION RURAL STEM AC-**  
4        **TIVITIES.**

5        *(a) PREPARING RURAL STEM EDUCATORS.—*

6                *(1) IN GENERAL.—The Director shall provide*  
7        *grants on a merit-reviewed, competitive basis to insti-*  
8        *tutions of higher education or nonprofit organizations*  
9        *(or a consortium thereof) for research and develop-*  
10       *ment to advance innovative approaches to support*  
11       *and sustain high-quality STEM teaching in rural*  
12       *schools.*

13               *(2) USE OF FUNDS.—*

14               *(A) IN GENERAL.—Grants awarded under*  
15       *this section shall be used for the research and de-*  
16       *velopment activities referred to in paragraph (1),*  
17       *which may include—*

18                        *(i) engaging rural educators of stu-*  
19       *dents in grades Pre-K through 12 in profes-*  
20       *sional learning opportunities to enhance*  
21       *STEM knowledge, including computer*  
22       *science, and develop best practices;*

23                        *(ii) supporting research on effective*  
24       *STEM teaching practices in rural settings,*  
25       *including the use of rubrics and mastery-*

1           *based grading practices to assess student*  
2           *performance when employing the*  
3           *transdisciplinary teaching approach for*  
4           *STEM disciplines;*

5                     *(iii) designing and developing pre-serv-*  
6                     *ice and in-service training resources to as-*  
7                     *sist such rural educators in adopting*  
8                     *transdisciplinary teaching practices across*  
9                     *STEM courses;*

10                    *(iv) coordinating with local partners to*  
11                    *adapt STEM teaching practices to leverage*  
12                    *local natural and community assets in*  
13                    *order to support in-place learning in rural*  
14                    *areas;*

15                    *(v) providing hands-on training and*  
16                    *research opportunities for rural educators*  
17                    *described in clause (i) at Federal Labora-*  
18                    *tories, institutions of higher education, or*  
19                    *in industry;*

20                    *(vi) developing training and best prac-*  
21                    *tices for educators who teach multiple grade*  
22                    *levels within a STEM discipline;*

23                    *(vii) designing and implementing pro-*  
24                    *fessional development courses and experi-*  
25                    *ences, including mentoring, for rural edu-*

1                   cators described in clause (i) that combine  
2                   face-to-face and online experiences; and

3                   (viii) any other activity the Director  
4                   determines will accomplish the goals of this  
5                   subsection.

6                   (B) *RURAL STEM COLLABORATIVE*.—The  
7                   Director may establish a pilot program of re-  
8                   gional cohorts in rural areas that will provide  
9                   peer support, mentoring, and hands-on research  
10                  experiences for rural STEM educators of students  
11                  in grades Pre-K through 12, in order to build an  
12                  ecosystem of cooperation among educators, re-  
13                  searchers, academia, and local industry.

14                  (b) *BROADENING PARTICIPATION OF RURAL STU-*  
15 *DENTS IN STEM*.—

16                  (1) *IN GENERAL*.—The Director shall provide  
17                  grants on a merit-reviewed, competitive basis to insti-  
18                  tutions of higher education or nonprofit organizations  
19                  (or a consortium thereof) for—

20                         (A) research and development of program-  
21                         ming to identify the barriers rural students face  
22                         in accessing high-quality STEM education; and

23                         (B) development of innovative solutions to  
24                         improve the participation and advancement of

1           *rural students in grades Pre-K through 12 in*  
2           *STEM studies.*

3           (2) *USE OF FUNDS.*—

4                 (A) *IN GENERAL.*—*Grants awarded under*  
5           *this section shall be used for the research and de-*  
6           *velopment activities referred to in paragraph (1),*  
7           *which may include—*

8                         (i) *developing partnerships with com-*  
9                         *munity colleges to offer advanced STEM*  
10                        *course work, including computer science, to*  
11                        *rural high school students;*

12                       (ii) *supporting research on effective*  
13                        *STEM practices in rural settings;*

14                       (iii) *implementing a school-wide*  
15                        *STEM approach;*

16                       (iv) *improving the National Science*  
17                        *Foundation's Advanced Technology Edu-*  
18                        *cation program's coordination and engage-*  
19                        *ment with rural communities;*

20                       (v) *collaborating with existing commu-*  
21                        *nity partners and networks, such as the co-*  
22                        *operative research and extension services of*  
23                        *the Department of Agriculture and youth*  
24                        *serving organizations like 4-H, after school*  
25                        *STEM programs, and summer STEM pro-*

1                    *grams, to leverage community resources and*  
2                    *develop place-based programming;*

3                    *(vi) connecting rural school districts*  
4                    *and institutions of higher education, to im-*  
5                    *prove precollegiate STEM education and*  
6                    *engagement;*

7                    *(vii) supporting partnerships that offer*  
8                    *hands-on inquiry-based science activities,*  
9                    *including coding, and access to lab re-*  
10                    *sources for students studying STEM in*  
11                    *grades Pre–K through 12 in a rural area;*

12                    *(viii) evaluating the role of broadband*  
13                    *connectivity and its associated impact on*  
14                    *the STEM and technology literacy of rural*  
15                    *students;*

16                    *(ix) building capacity to support ex-*  
17                    *tracurricular STEM programs in rural*  
18                    *schools, including mentor-led engagement*  
19                    *programs, STEM programs held during*  
20                    *nonschool hours, STEM networks,*  
21                    *makerspaces, coding activities, and competi-*  
22                    *tions; and*

23                    *(x) any other activity the Director de-*  
24                    *termines will accomplish the goals of this*  
25                    *subsection.*

1       (c) *APPLICATION.*—*An applicant seeking a grant*  
2 *under subsection (a) or (b) shall submit an application at*  
3 *such time, in such manner, and containing such informa-*  
4 *tion as the Director may require. The application may in-*  
5 *clude the following:*

6           (1) *A description of the target population to be*  
7 *served by the research activity or activities for which*  
8 *such grant is sought.*

9           (2) *A description of the process for recruitment*  
10 *and selection of students, educators, or schools from*  
11 *rural areas to participate in such activity or activi-*  
12 *ties.*

13           (3) *A description of how such activity or activi-*  
14 *ties may inform efforts to promote the engagement*  
15 *and achievement of rural students in grades PreK -*  
16 *12 in STEM studies.*

17           (4) *In the case of a proposal consisting of a part-*  
18 *nership or partnerships with one or more rural*  
19 *schools and one or more researchers, a plan for estab-*  
20 *lishing a sustained partnership that is jointly devel-*  
21 *oped and managed, draws from the capacities of each*  
22 *partner, and is mutually beneficial.*

23       (d) *PARTNERSHIPS.*—*In awarding grants under sub-*  
24 *section (a) or (b), the Director shall—*

1           (1) *encourage applicants which, for the purpose*  
2           *of the activity or activities funded through the grant,*  
3           *include or partner with a nonprofit organization or*  
4           *an institution of higher education (or a consortium*  
5           *thereof) that has extensive experience and expertise in*  
6           *increasing the participation of rural students in*  
7           *grades Pre-K through 12 in STEM;*

8           (2) *encourage applicants which, for the purpose*  
9           *of the activity or activities funded through the grant,*  
10          *include or partner with a consortium of rural schools*  
11          *or rural school districts; and*

12          (3) *encourage applications which, for the pur-*  
13          *pose of the activity or activities funded through the*  
14          *grant, include commitments from school principals*  
15          *and administrators to making reforms and activities*  
16          *proposed by the applicant a priority.*

17          (e) *EVALUATIONS.—All proposals for grants under*  
18          *subsections (a) and (b) shall include an evaluation plan*  
19          *that includes the use of outcome oriented measures to assess*  
20          *the impact and efficacy of the grant. Each recipient of a*  
21          *grant under this section shall include results from these*  
22          *evaluative activities in annual and final projects.*

23          (f) *ACCOUNTABILITY AND DISSEMINATION.—*

1           (1) *EVALUATION REQUIRED.*—*The Director shall*  
2 *evaluate the portfolio of grants awarded under sub-*  
3 *sections (a) and (b). Such evaluation shall—*

4                   (A) *use a common set of benchmarks and*  
5 *tools to assess the results of research conducted*  
6 *under such grants and identify best practices;*  
7 *and*

8                   (B) *to the extent practicable, integrate the*  
9 *findings of research resulting from the activity*  
10 *or activities funded through such grants with the*  
11 *findings of other research on rural student’s pur-*  
12 *suit of degrees or careers in STEM.*

13           (2) *REPORT ON EVALUATIONS.*—*Not later than*  
14 *180 days after the completion of the evaluation under*  
15 *paragraph (1), the Director shall submit to Congress*  
16 *and make widely available to the public a report that*  
17 *includes—*

18                   (A) *the results of the evaluation; and*

19                   (B) *any recommendations for administra-*  
20 *tive and legislative action that could optimize*  
21 *the effectiveness of the grants awarded under this*  
22 *section.*

23           (g) *REPORT BY COMMITTEE ON EQUAL OPPORTUNI-*  
24 *TIES IN SCIENCE AND ENGINEERING.*—

1           (1) *IN GENERAL.*—As part of the first report re-  
2           quired by section 36(e) of the Science and Engineer-  
3           ing Equal Opportunities Act (42 U.S.C. 1885c(e))  
4           transmitted to Congress after the date of enactment of  
5           this Act, the Committee on Equal Opportunities in  
6           Science and Engineering shall include—

7                   (A) a description of past and present poli-  
8                   cies and activities of the Foundation to encour-  
9                   age full participation of students in rural com-  
10                  munities in science, mathematics, engineering,  
11                  and computer science fields; and

12                  (B) an assessment of trends in participa-  
13                  tion of rural students in grades Pre-K through  
14                  12 in Foundation activities, and an assessment  
15                  of the policies and activities of the Foundation,  
16                  along with proposals for new strategies or the  
17                  broadening of existing successful strategies to-  
18                  wards facilitating the goals of this Act.

19           (2) *TECHNICAL CORRECTION.*—

20                   (A) *IN GENERAL.*—Section 313 of the Amer-  
21                   ican Innovation and Competitiveness Act (Public  
22                   Law 114–329) is amended by striking “Section  
23                   204(e) of the National Science Foundation Au-  
24                   thorization Act of 1988” and inserting “Section

1           36(e) of the Science and Engineering Equal Op-  
2           portunities Act”.

3                   (B) *APPLICABILITY.*—The amendment made  
4           by paragraph (1) shall take effect as if included  
5           in the enactment of section 313 of the American  
6           Innovation and Competitiveness Act (Public  
7           Law 114–329).

8           (h) *COORDINATION.*—In carrying out this section, the  
9           Director shall, for purposes of enhancing program effective-  
10          ness and avoiding duplication of activities, consult, cooper-  
11          ate, and coordinate with the programs and policies of other  
12          relevant Federal agencies.

13           (i) *AUTHORIZATION OF APPROPRIATIONS.*—There are  
14          authorized to be appropriated to the Director—

15                   (1) \$8,000,000 to carry out the activities under  
16          subsection (a) for each of fiscal years 2020 through  
17          2025; and

18                   (2) \$12,000,000 to carry out the activities under  
19          subsection (b) for each of fiscal years 2020 through  
20          2025.

21   **SEC. 4. OPPORTUNITIES FOR ONLINE EDUCATION.**

22           (a) *IN GENERAL.*—The Director shall award competi-  
23          tive grants to institutions of higher education or nonprofit  
24          organizations (or a consortium thereof, which may include

1 a private sector partner) to conduct research on online  
2 STEM education courses for rural communities.

3 (b) RESEARCH AREAS.—The research areas eligible for  
4 funding under this subsection shall include—

5 (1) evaluating the learning and achievement of  
6 rural students in grades Pre–K through 12 in STEM  
7 subjects;

8 (2) understanding how computer-based and on-  
9 line professional development courses and mentor ex-  
10 periences can be integrated to meet the needs of edu-  
11 cators of rural students in grades Pre–K through 12;

12 (3) combining computer-based and online STEM  
13 education and training with apprenticeships, men-  
14 toring, or other applied learning arrangements;

15 (4) leveraging online programs to supplement  
16 STEM studies for rural students that need physical  
17 and academic accommodation; and

18 (5) any other activity the Director determines  
19 will accomplish the goals of this subsection.

20 (c) EVALUATIONS.—All proposals for grants under this  
21 section shall include an evaluation plan that includes the  
22 use of outcome oriented measures to assess the impact and  
23 efficacy of the grant. Each recipient of a grant under this  
24 section shall include results from these evaluative activities  
25 in annual and final projects.

1       (d) *ACCOUNTABILITY AND DISSEMINATION.*—

2               (1) *EVALUATION REQUIRED.*—*The Director shall*  
3 *evaluate the portfolio of grants awarded under this*  
4 *section. Such evaluation shall—*

5                       (A) *use a common set of benchmarks and*  
6 *tools to assess the results of research conducted*  
7 *under such grants and identify best practices;*  
8 *and*

9                       (B) *to the extent practicable, integrate find-*  
10 *ings from activities carried out pursuant to re-*  
11 *search conducted under this section, with respect*  
12 *to the pursuit of careers and degrees in STEM,*  
13 *with those activities carried out pursuant to*  
14 *other research on serving rural students and*  
15 *communities.*

16               (2) *REPORT ON EVALUATIONS.*—*Not later than*  
17 *180 days after the completion of the evaluation under*  
18 *paragraph (1), the Director shall submit to Congress*  
19 *and make widely available to the public a report that*  
20 *includes—*

21                       (A) *the results of the evaluation; and*

22                       (B) *any recommendations for administra-*  
23 *tive and legislative action that could optimize*  
24 *the effectiveness of the grants awarded under this*  
25 *section.*

1       (e) *COORDINATION.*—*In carrying out this section, the*  
2 *Director shall, for purposes of enhancing program effective-*  
3 *ness and avoiding duplication of activities, consult, cooper-*  
4 *ate, and coordinate with the programs and policies of other*  
5 *relevant Federal agencies.*

6 **SEC. 5. NATIONAL ACADEMY OF SCIENCES EVALUATION.**

7       (a) *STUDY.*—*Not later than 12 months after the date*  
8 *of enactment of this Act, the Director shall enter into an*  
9 *agreement with the National Academy of Sciences under*  
10 *which the National Academy agrees to conduct an evalua-*  
11 *tion and assessment that—*

12               (1) *evaluates the quality and quantity of current*  
13 *Federal programming and research directed at exam-*  
14 *ining STEM education for students in grades Pre–K*  
15 *through 12 and workforce development in rural areas;*

16               (2) *assesses the impact of the scarcity of*  
17 *broadband connectivity in rural communities has on*  
18 *STEM and technical literacy for students in grades*  
19 *Pre–K through 12 in rural areas;*

20               (3) *assesses the core research and data needed to*  
21 *understand the challenges rural areas are facing in*  
22 *providing quality STEM education and workforce de-*  
23 *velopment; and*

24               (4) *makes recommendations for action at the*  
25 *Federal, State, and local levels for improving STEM*

1        *education for students in grades Pre–K through 12*  
2        *and workforce development in rural areas.*

3        *(b) REPORT TO DIRECTOR.—The agreement entered*  
4        *into under subsection (a) shall require the National Acad-*  
5        *emy of Sciences, not later than 24 months after the date*  
6        *of enactment of this Act, to submit to the Director a report*  
7        *on the study conducted under such subsection, including the*  
8        *National Academy’s findings and recommendations.*

9        *(c) AUTHORIZATION OF APPROPRIATIONS.—There are*  
10       *authorized to be appropriated to the Director to carry out*  
11       *this section \$1,000,000 for fiscal year 2020.*

12       **SEC. 6. GAO REVIEW.**

13       *Not later than 3 years after the date of enactment of*  
14       *this Act, the Comptroller General of the United States shall*  
15       *conduct a study on the engagement of rural populations in*  
16       *Federal STEM programs and submit to Congress a report*  
17       *that includes—*

18                *(1) an assessment of how Federal STEM edu-*  
19                *cation programs are serving rural populations;*

20                *(2) a description of initiatives carried out by*  
21                *Federal agencies that are targeted at supporting*  
22                *STEM education in rural areas;*

23                *(3) an assessment of what is known about the*  
24                *impact and effectiveness of Federal investments in*

1        *STEM education programs that are targeted to rural*  
2        *areas; and*

3            (4) *an assessment of challenges that state and*  
4        *Federal STEM education programs face in reaching*  
5        *rural population centers.*

6        **SEC. 7. CAPACITY BUILDING THROUGH EPSCOR.**

7        *Section 517(f)(2) of the America COMPETES Reau-*  
8        *thorization Act of 2010 (42 U.S.C. 1862p-9(f)(2)) is*  
9        *amended—*

10            (1) *in subparagraph (A), by striking “and” at*  
11        *the end; and*

12            (2) *by adding at the end the following:*

13                    *“(C) to increase the capacity of rural com-*  
14                    *munities to provide quality STEM education*  
15                    *and STEM workforce development programming*  
16                    *to students, and teachers; and”.*

17        **SEC. 8. NIST ENGAGEMENT WITH RURAL COMMUNITIES.**

18        (a) *MEP OUTREACH.*—*Section 25 of the National In-*  
19        *stitute of Standards and Technology Act (15 U.S.C. 278k)*  
20        *is amended—*

21            (1) *in subsection (c)—*

22                    (A) *in paragraph (6), by striking “commu-*  
23                    *nity colleges and area career and technical edu-*  
24                    *cation schools” and inserting the following: “sec-*  
25                    *ondary schools (as defined in section 8101 of the*

1           *Elementary and Secondary Education Act of*  
2           *1965 (20 U.S.C. 7801)), community colleges, and*  
3           *area career and technical education schools, in-*  
4           *cluding those in underserved and rural commu-*  
5           *nities,”; and*

6                   *(B) in paragraph (7)—*

7                           *(i) by striking “and local colleges” and*  
8                           *inserting the following: “local high schools*  
9                           *and local colleges, including those in under-*  
10                           *served and rural communities,”; and*

11                           *(ii) by inserting “or other applied*  
12                           *learning opportunities” after “apprentice-*  
13                           *ships”; and*

14                   *(2) in subsection (d)(3) by striking “, commu-*  
15                   *nity colleges, and area career and technical education*  
16                   *schools,” and inserting the following: “and local high*  
17                   *schools, community colleges, and area career and tech-*  
18                   *nical education schools, including those in under-*  
19                   *served and rural communities.”.*

20           *(b) RURAL CONNECTIVITY PRIZE COMPETITION.—*

21                   *(1) PRIZE COMPETITION.—Pursuant to section*  
22                   *24 of the Stevenson-Wydler Technology Innovation*  
23                   *Act of 1980 (15 U.S.C. 3719), the Secretary of Com-*  
24                   *merce, acting through the Under Secretary of Com-*  
25                   *merce for Standards and Technology (referred to in*

1        *this subsection as the “Secretary”), shall carry out a*  
2        *program to award prizes competitively to stimulate*  
3        *research and development of creative technologies in*  
4        *order to deploy affordable and reliable broadband*  
5        *connectivity to underserved rural communities.*

6            (2) *PLAN FOR DEPLOYMENT IN RURAL COMMU-*  
7        *NITIES.—Each proposal submitted pursuant to para-*  
8        *graph (1) shall include a plan for deployment of the*  
9        *technology that is the subject of such proposal in an*  
10       *underserved rural community.*

11           (3) *PRIZE AMOUNT.—In carrying out the pro-*  
12       *gram under paragraph (1), the Secretary may award*  
13       *not more than a total of \$5,000,000 to one or more*  
14       *winners of the prize competition.*

15           (4) *REPORT.—Not later than 60 days after the*  
16       *date on which a prize is awarded under the prize*  
17       *competition, the Secretary shall submit to the relevant*  
18       *committees of Congress a report that describes the*  
19       *winning proposal of the prize competition.*

20           (5) *CONSULTATION.—In carrying out the pro-*  
21       *gram under subsection (a), the Secretary may consult*  
22       *with the heads of relevant departments and agencies*  
23       *of the Federal Government.*

1 **SEC. 9. NITR-D BROADBAND WORKING GROUP.**

2 *Title I of the High-Performance Computing Act of*  
3 *1991 (15 U.S.C. 5511 et seq.) is amended by adding at the*  
4 *end the following:*

5 **“SEC. 103. BROADBAND RESEARCH AND DEVELOPMENT**  
6 **WORKING GROUP.**

7 *“(a) IN GENERAL.—The Director shall establish a*  
8 *broadband research and development working group to ad-*  
9 *dress national research challenges and opportunities for im-*  
10 *proving broadband access and adoption across the United*  
11 *States.*

12 *“(b) ACTIVITIES.—The working group shall identify*  
13 *and coordinate key research priorities for addressing*  
14 *broadband access and adoption, including—*

15 *“(1) promising research areas;*

16 *“(2) requirements for data collection and shar-*  
17 *ing;*

18 *“(3) opportunities for better alignment and co-*  
19 *ordination across Federal agencies and external stake-*  
20 *holders; and*

21 *“(4) input on the development of new Federal*  
22 *policies and programs to enhance data collection and*  
23 *research.*

24 *“(c) COORDINATION.—The working group shall coordi-*  
25 *nate, as appropriate, with the Rural Broadband Integra-*  
26 *tion Working Group established under section 6214 of the*

1 *Agriculture Improvement Act of 2018 (Public Law 115–*  
2 *334) and the National Institute of Food and Agriculture*  
3 *of the Department of Agriculture.*

4 “(d) *REPORT.*—*The working group shall report to*  
5 *Congress on their activities as part of the annual report*  
6 *submitted under section 101(a)(2)(D).*

7 “(e) *SUNSET.*—*The authority to carry out this section*  
8 *shall terminate on the date that is 5 years after the date*  
9 *of enactment of the Rural STEM Education Act.”.*

10 **SEC. 10. DEFINITIONS.**

11 *In this Act:*

12 (1) *DIRECTOR.*—*The term “Director” means the*  
13 *Director of the National Science Foundation estab-*  
14 *lished under section 2 of the National Science Foun-*  
15 *dation Act of 1950 (42 U.S.C. 1861).*

16 (2) *FEDERAL LABORATORY.*—*The term “Federal*  
17 *laboratory” has the meaning given such term in sec-*  
18 *tion 4 of the Stevenson-Wydler Technology Innovation*  
19 *Act of 1980 (15 U.S.C. 3703).*

20 (3) *FOUNDATION.*—*The term “Foundation”*  
21 *means the National Science Foundation established*  
22 *under section 2 of the National Science Foundation*  
23 *Act of 1950 (42 U.S.C. 1861).*

24 (4) *INSTITUTION OF HIGHER EDUCATION.*—*The*  
25 *term “institution of higher education” has the mean-*

1        *ing given such term in section 101(a) of the Higher*  
2        *Education Act of 1965 (20 U.S.C. 1001(a)).*

3            (5) *STEM.*—*The term “STEM” has the meaning*  
4        *given the term in section 2 of the America COM-*  
5        *PETES Reauthorization Act of 2010 (42 U.S.C. 6621*  
6        *note).*

7            (6) *STEM EDUCATION.*—*The term “STEM edu-*  
8        *cation” has the meaning given the term in section 2*  
9        *of the STEM Education Act of 2015 (42 U.S.C. 6621*  
10       *note).*



Union Calendar No. 319

116<sup>TH</sup> CONGRESS  
2<sup>D</sup> SESSION

**H. R. 4979**

[Report No. 116-397]

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## **A BILL**

To direct the Director of the National Science Foundation to support STEM education and workforce development research focused on rural areas, and for other purposes.

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FEBRUARY 13, 2020

Reported with an amendment, committed to the Committee of the Whole House on the State of the Union, and ordered to be printed