



CONGRESSIONAL BUDGET OFFICE  
COST ESTIMATE

May 10, 2018

**H.R. 5509**

**Innovations in Mentoring, Training, and Apprenticeships Act**

*As ordered reported by the House Committee on Science, Space, and Technology  
on April 17, 2018*

**SUMMARY**

H.R. 5509 would authorize the National Science Foundation (NSF) to award grants to community colleges, universities, and nonprofit organizations to develop and improve education and work opportunities in science, technology, engineering, and mathematics (STEM). The bill also would require the NSF to conduct research on the STEM and technical workforce in the United States. CBO estimates that implementing H.R. 5509 would cost \$29 million over the 2019-2023 period, assuming appropriation of the authorized and estimated amounts.

Enacting H.R. 5509 would not affect direct spending or revenues; therefore, pay-as-you-go procedures do not apply.

CBO estimates that enacting H.R. 5509 would not increase net direct spending or on-budget deficits in any of the four consecutive 10-year periods beginning in 2029.

H.R. 5509 contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act (UMRA).

**ESTIMATED COST TO THE FEDERAL GOVERNMENT**

The estimated budgetary effect of H.R. 5509 is shown in the following table. The costs of the legislation fall within budget function 250 (general science, space, and technology).

	By Fiscal Year, in Millions of Dollars						
	2018	2019	2020	2021	2022	2023	2019-2023
<b>INCREASES IN SPENDING SUBJECT TO APPROPRIATION</b>							
<b>STEM Grants</b>							
Authorization Level	10	10	10	10	0	0	30
Estimated Outlays	0	1	5	7	8	5	26
<b>Other Provisions</b>							
Estimated Authorization Level	0	1	1	1	0	0	3
Estimated Outlays	0	1	1	1	0	0	3
<b>Total</b>							
Estimated Authorization Level	10	11	11	11	0	0	33
Estimated Outlays	0	2	6	8	8	5	29

H.R. 5509 would effectively authorize the appropriation of \$10 million in 2018 for STEM grants. CBO does not estimate any outlays for that authorization because appropriations for 2018 have already been provided.

STEM = Science, Technology, Engineering, and Mathematics.

## BASIS OF ESTIMATE

For this estimate, CBO assumes that H.R. 5509 will be enacted near the end of 2018. Section 5 of the bill states that no additional funds are authorized to be appropriated by H.R. 5509. In CBO’s view, however, the bill effectively authorizes the appropriation of funding because even if additional funding was not provided specifically for those purposes, the agency would have to spend appropriated resources on the new activity instead of using those funds to carry out other statutory responsibilities.

**STEM Grants.** H.R. 5509 would establish a program through the NSF to award grants to community colleges with associate’s degree programs in STEM, to universities that partner with employers to offer STEM work opportunities, and to nonprofits and postsecondary education institutions to expand online technical training. The NSF’s Advanced Technological Education program is similar to the program proposed by the bill. In recent years, the NSF’s spending for that program has been around \$65 million annually. Under current law, no specific sums are authorized to be appropriated for that program after 2018.

H.R. 5509 would effectively authorize the appropriation of \$10 million annually over the 2018-2021 period for the grants. CBO does not estimate any outlays for the authorization for 2018 because appropriations for 2018 have already been provided. Based on historical spending patterns for similar programs, CBO estimates that implementing those

provisions would cost \$26 million over the 2019-2023 period, assuming appropriation of the authorized amounts.

**Other Provisions.** Section 4 of the bill would require the NSF to conduct research and submit reports to the Congress on the STEM and technical workforce in the United States. Using information from the NSF, CBO estimates that the agency would need two additional employees, at an annual average cost of about \$320,000. Section 6 of H.R. 5509 would require the NSF to evaluate the grants provided under the bill. Based on the costs of similar evaluations, CBO estimates that provision would cost about \$2 million. In total, CBO estimates that the activities required by those sections would cost \$3 million over the 2019-2023 period; such spending would be subject to the availability of appropriated funds.

**PAY-AS-YOU-GO CONSIDERATIONS:** None.

## **INCREASE IN LONG-TERM DIRECT SPENDING AND DEFICITS**

CBO estimates that enacting H.R. 5509 would not increase net direct spending or on-budget deficits in any of the four consecutive 10-year periods beginning in 2029.

## **MANDATES**

H.R. 5509 contains no intergovernmental or private-sector mandates as defined in UMRA.

## **ESTIMATE PREPARED BY**

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