

S. 3704, Advanced Technological Manufacturing Act

As ordered reported by the Senate Committee on Commerce, Science, and Transportation on May 20, 2020

By Fiscal Year, Millions of Dollars	2021	2021-2025	2021-2030
Direct Spending (Outlays)	0	0	0
Revenues	0	0	0
Increase or Decrease (-) in the Deficit	0	0	0
Spending Subject to Appropriation (Outlays)	9	406	not estimated
Statutory pay-as-you-go procedures apply?	No	Mandate Effects	
Increases on-budget deficits in any of the four consecutive 10-year periods beginning in 2031?	No	Contains intergovernmental mandate?	No
		Contains private-sector mandate?	No

S. 3704 would authorize the annual appropriation of \$150 million over the 2021-2026 period for the National Science Foundation’s (NSF’s) Advanced Technological Education (ATE) program, which provides grants to educators and students for technical science and engineering education. The bill also would direct the agency to conduct pilot programs to increase the number of institutions of higher education that can compete for NSF grants.

For this estimate, CBO assumes that the legislation will be enacted early in fiscal year 2021 and that the authorized and estimated amounts will be appropriated each year.

In 2020, the NSF allocated \$75 million for the ATE program. Because CBO estimates the budgetary effects of continuing resolutions on an annualized basis, in 2021 CBO assumes that the NSF will allocate the same amount from funds made available under the current continuing resolution (Public Law 116-159). As a result, CBO estimates that S. 3704 would authorize an increase in spending subject to appropriation in 2021 of \$75 million, the difference between the authorized amount and the annualized amount under the continuing resolution. Based on historical spending patterns for the program, CBO estimates that providing the ATE grants would cost \$404 million over the 2021-2025 period and roughly \$400 million after 2025, assuming appropriation of the authorized amounts.

Using information from the NSF, and based on the costs of similar activities, CBO estimates that conducting the pilot programs would require two additional employees at an average annual cost of \$175,000 each over the 2021-2025 period. In total, implementing that provision would cost \$2 million. Such spending would be subject to the availability of appropriated funds.

The costs of the legislation, detailed in Table 1, fall within budget function 250 (general science, space, and technology).

**Table 1.
Estimated Increases in Spending Subject to Appropriation Under S. 3704**

	By Fiscal Year, Millions of Dollars					2021-2025
	2021	2022	2023	2024	2025	
Advanced Technological Education						
Authorization ^a	75	150	150	150	150	675
Estimated Outlays	9	44	90	121	140	404
Pilot Programs						
Estimated Authorization	*	*	*	*	*	2
Estimated Outlays	*	*	*	*	*	2
Total Changes						
Estimated Authorization	75	150	150	150	150	677
Estimated Outlays	9	44	90	121	140	406

Components may not sum to totals because of rounding; * = between zero and \$500,000.

- a. S. 3704 would authorize the appropriation of \$150 million in 2021 for the Advanced Technological Education program. However, using information from the National Science Foundation, CBO estimates that \$75 million has been allocated on an annualized basis from funds made available under the current continuing resolution (Public Law 116-159). Thus, the estimated authorization for 2021 (\$75 million) is equal to the specified amount (\$150 million) minus the annualized amount from the continuing resolution (\$75 million).

The CBO staff contact for this estimate is Janani Shankaran. The estimate was reviewed by H. Samuel Papenfuss, Deputy Director of Budget Analysis.