

At a Glance

S. 2256, Federal Cybersecurity Workforce Expansion Act

As ordered reported by the Senate Committee on Homeland Security and Governmental Affairs on July 26, 2023

By Fiscal Year, Millions of Dollars	2023	2023-2028	2023-2033
Direct Spending (Outlays)	0	*	*
Revenues	0	0	0
Increase or Decrease (-) in the Deficit	0	*	*
Spending Subject to Appropriation (Outlays)	0	30	not estimated

Increases <i>net direct spending</i> in any of the four consecutive 10-year periods beginning in 2034?	No	Statutory pay-as-you-go procedures apply?	Yes
		Mandate Effects	
Increases <i>on-budget deficits</i> in any of the four consecutive 10-year periods beginning in 2034?	No	Contains intergovernmental mandate?	No
		Contains private-sector mandate?	No

* = between -\$500,000 and \$500,000.

The bill would

- Establish a cybersecurity apprenticeship program
- Create a cybersecurity training program for veterans and spouses of military personnel
- Extend reporting requirements for federal positions related to information technology and cybersecurity

Estimated budgetary effects would mainly stem from

- Hiring and training cybersecurity apprentices
- Developing cybersecurity training courses for veterans and military spouses
- Spending veterans' education benefits on cybersecurity training

Detailed estimate begins on the next page.

See also

[CBO's Cost Estimates Explained](#), [CBO Describes Its Cost-Estimating Process](#), [Glossary](#)



Bill Summary

S. 2256 would require the Department of Homeland Security (DHS) to establish a cybersecurity apprenticeship program to recruit and hire people to perform information technology and cybersecurity roles for the department. DHS also would provide apprentices with training courses and career development materials.

In addition, S. 2256 would require DHS to establish a program to provide cybersecurity training without charge to veterans who are eligible for education benefits administered by the Department of Veterans Affairs (VA).

Estimated Federal Cost

The estimated budgetary effects of S. 2256 are shown in Table 1. The costs of the legislation fall within budget function 050 (national defense).

Table 1.							
Estimated Increases in Spending Subject to Appropriation Under S. 2256							
	By Fiscal Year, Millions of Dollars						2023-2028
	2023	2024	2025	2026	2027	2028	
Cybersecurity Apprentices							
Estimated Authorization	0	0	2	5	5	5	17
Estimated Outlays	0	0	2	5	5	5	17
Curriculum and Training							
Estimated Authorization	0	0	8	0	0	0	8
Estimated Outlays	0	0	5	3	0	0	8
Program Management Staff							
Estimated Authorization	0	*	1	1	1	2	5
Estimated Outlays	0	*	1	1	1	2	5
Total Changes							
Estimated Authorization	0	*	11	6	6	7	30
Estimated Outlays	0	*	8	9	6	7	30

* = between zero and \$500,000.

In addition to the budgetary effects shown above, CBO estimates that enacting S. 2256 would have insignificant effects on direct spending and the deficit over the 2023-2033 period.

Basis of Estimate

For this estimate, CBO assumes that S. 2256 will be enacted early in fiscal year 2024 and that the required pilot programs would begin to operate in 2025. CBO also expects that cybersecurity apprentices would serve for a two-year term. Under S. 2256, the authority to operate the pilot programs would terminate five years after their establishment. Outlays are estimated using historical spending patterns for existing or similar programs.



Spending Subject to Appropriation

CBO estimates that implementing the bill would cost \$30 million over the 2023-2028 period. Such spending would be subject to the availability of appropriated funds.

Cybersecurity Apprentices. S. 2256 would require DHS to recruit and hire apprentices to fill a range of information technology and cybersecurity roles across the department. On the basis of information from the Department of Labor about the average duration and salaries of similar government apprenticeship programs, CBO expects that each apprentice would serve for two years at an average annual cost of about \$92,000 for salaries and benefits. CBO anticipates that each cohort of apprentices would include 25 people, the maximum annual number of new hires permitted under S. 2256, and that DHS would hire the first cohort in 2025. Because each cohort would serve for two years, CBO expects that DHS would employ 50 cyber apprentices each year once the second cohort is hired. On that basis and accounting for the effects of anticipated inflation, CBO estimates that compensation for apprentices hired under S. 2256 would total \$17 million over the 2023-2028 period.

Curriculum and Training. S. 2256 would require DHS to develop cybersecurity training courses for the apprenticeship and veteran training programs authorized under the bill. CBO expects that DHS would contract with private-sector cybersecurity firms to design the curricula for those courses and create online platforms to access the training. Based on the costs of similar programs at DHS, CBO estimates that cyber training services and materials would cost about \$8 million over the 2023-2028 period.

Program Management Staff. Using information about similar training programs, CBO anticipates that DHS would need five full-time employees to create and manage the new programs. CBO estimates that their compensation would total \$5 million over the 2023-2028 period.

Cybersecurity Workforce Assessment Extension. S. 2256 would extend, from 2022 to 2027, the reporting requirements established under the Federal Cybersecurity Workforce Assessment Act. Satisfying those requirements would increase spending subject to appropriation by less than \$500,000 over the 2023-2028 period, CBO estimates. That extension also would affect some agencies that finance operations from sources other than discretionary appropriations; those effects are discussed below under the heading “Direct Spending.”

Direct Spending

Several provisions in S. 2256 would have insignificant effects on direct spending over the 2023-2033 period, in CBO’s estimation.

Cybersecurity Training for Veterans and Military Spouses. CBO expects that some veterans and their spouses who are eligible for education benefits administered by VA would



increase their use of those benefits as a result of the cybersecurity training program. At the same time, some veterans who otherwise would have used their benefits to enroll in a postsecondary education program would instead use them for cybersecurity training (which would typically cost less). The costs of VA education benefits are paid from mandatory appropriations. CBO estimates that the changes in the use of benefits would have insignificant net effects on direct spending over the 2023-2033 period.

Cybersecurity Workforce Assessment Extension. As described above under the heading “Spending Subject to Appropriation,” S. 2256 would extend the reporting requirements established under the Federal Cybersecurity Workforce Assessment Act. Enacting that extension could affect direct spending by some agencies that use fees, receipts from the sale of goods, and other collections to cover operating costs. CBO estimates that any net changes in direct spending by those agencies would be negligible because most of them can adjust amounts collected to accommodate changes in operating costs.

Pay-As-You-Go Considerations:

The Statutory Pay-As-You-Go Act of 2010 establishes budget-reporting and enforcement procedures for legislation affecting direct spending or revenues. CBO estimates that enacting the bill would have insignificant effects on direct spending and the deficit over the 2023-2033 period.

Increase in Long-Term Net Direct Spending and Deficits: None.

Mandates: None.

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A handwritten signature in black ink that reads "Phillip L. Swagel". The signature is fluid and cursive, with a long, sweeping underline.

Phillip L. Swagel

Director, Congressional Budget Office