

### At a Glance

## H.R. 3565, Spectrum Auction Reauthorization Act of 2023

As ordered reported by the House Committee on Energy and Commerce on May 24, 2023

| By Fiscal Year, Millions of Dollars            | 2023 | 2023-2028 | 2023-2033     |
|--|------|-----------|---------------|
| Direct Spending (Outlays)                      | 0    | -8,740    | -1,160        |
| Revenues                                       | 0    | 0         | 0             |
| Increase or Decrease (-)<br>in the Deficit     | 0    | -8,740    | -1,160        |
| Spending Subject to<br>Appropriation (Outlays) | 0    | 5         | not estimated |

|   |                                      |   |                      |
|---|--------------------------------------|---|----------------------|
| Increases <i>net direct spending</i> in any of the four consecutive 10-year periods beginning in 2034?<br><br>Increases <i>on-budget deficits</i> in any of the four consecutive 10-year periods beginning in 2034? | < \$2.5 billion<br><br>< \$5 billion | Statutory pay-as-you-go procedures apply? | Yes                  |
|   |                                      | <b>Mandate Effects</b>                    |                      |
|   |                                      | Contains intergovernmental mandate?       | No                   |
|   |                                      | Contains private-sector mandate?          | Yes, Under Threshold |

#### The bill would

- Modify and extend the authority of the Federal Communications Commission (FCC) to auction licenses for commercial use of the electromagnetic spectrum
- Establish a Spectrum Auction Trust Fund to receive a portion of future spectrum auction proceeds
- Authorize the National Telecommunications and Information Administration (NTIA) to spend a portion of auction proceeds on advanced emergency communication services and broadband infrastructure
- Authorize the FCC and NTIA to borrow from the Treasury to support the removal and replacement of communications equipment that threatens national security and to establish a digital equity program
- Impose a private-sector mandate as defined in the Unfunded Mandates Reform Act

#### Estimated budgetary effects would mainly stem from

- Increased receipts from spectrum auctions
- Spending of auction proceeds and amounts borrowed from the Treasury
- Spending subject to appropriation to support federal spectrum coordination activities

#### Areas of significant uncertainty include

- Estimating the amount and timing of proceeds from future spectrum auctions, which could vary depending on market conditions, technologies, and encumbrances on spectrum bands to be auctioned

**Detailed estimate begins on the next page.**

See also

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



## Bill Summary

H.R. 3565 would modify and extend the authority of the Federal Communications Commission (FCC) to auction licenses for the commercial use of the electromagnetic spectrum. Specifically, the bill would extend the FCC's general authority to conduct new spectrum auctions through September 30, 2026, and extend and modify the terms of two auctions authorized under current law.

Under H.R. 3565, a portion of the auction proceeds would be deposited into the Spectrum Auction Trust Fund (SATF) established by the bill and those amounts would be available for spending, with certain limits, without further appropriation. The National Telecommunications and Information Administration (NTIA) would be authorized to draw funds from the SATF to award grants to help emergency communications centers better receive, process, and analyze 911 requests; and to help states, tribes, and localities to build and expand broadband infrastructure.

In addition, H.R. 3565 would increase funding to reimburse communications providers for removing equipment produced by entities deemed to pose a national security risk, authorize funding for grants to certain nonprofit organizations dedicated to advancing digital equity, and create a program to allow federal and nonfederal entities to share radio frequency spectrum while managing interference.

## Estimated Federal Cost

The estimated budgetary effect of H.R. 3565 is shown in Table 1. The costs of the legislation fall within budget functions 370 (commerce and housing credit) and 950 (undistributed offsetting receipts).

## Basis of Estimate

CBO assumes that the bill will be enacted late in fiscal year 2023 and that spending will follow historical patterns for similar activities.

CBO estimates that enacting H.R. 3565 would, on net, reduce direct spending by \$1.2 billion over the 2023-2033 period. That amount is composed of an increase in offsetting receipts (which are recorded in the budget as decreases in direct spending) of \$13.6 billion and an increase in spending of \$12.4 billion.



**Table 1.  
Estimated Budgetary Effects of H.R. 3565**

|  | By Fiscal Year, Millions of Dollars |      |      |        |         |        |       |       |       |       |      | 2023-2028 | 2023-2033 |
|--|-------------------------------------|------|------|--------|---------|--------|-------|-------|-------|-------|------|-----------|-----------|
|  | 2023                                | 2024 | 2025 | 2026   | 2027    | 2028   | 2029  | 2030  | 2031  | 2032  | 2033 |           |           |
| <b>Increases or Decreases (-) in Direct Spending<sup>a</sup></b> |                                     |      |      |        |         |        |       |       |       |       |      |           |           |
| FCC Auction Receipts   |                                     |      |      |        |         |        |       |       |       |       |      |           |           |
| Budget Authority   | 0                                   | 0    | 450  | -2,000 | -10,500 | -1,500 | 0     | 0     | 0     | 0     | 0    | -13,550   | -13,550   |
| Estimated Outlays  | 0                                   | 0    | 450  | -2,000 | -10,500 | -1,500 | 0     | 0     | 0     | 0     | 0    | -13,550   | -13,550   |
| Spending of Auction Receipts                                     |                                     |      |      |        |         |        |       |       |       |       |      |           |           |
| Budget Authority   | 3,425                               | 0    | 210  | 210    | 7,160   | 1,600  | 0     | 0     | 0     | 0     | 0    | 12,605    | 12,605    |
| Estimated Outlays  | 0                                   | 40   | 125  | 1,275  | 1,255   | 2,115  | 2,170 | 1,895 | 1,720 | 1,090 | 705  | 4,810     | 12,390    |
| <b>Total</b>   |                                     |      |      |        |         |        |       |       |       |       |      |           |           |
| Budget Authority   | 3,425                               | 0    | 660  | -1,790 | -3,340  | 100    | 0     | 0     | 0     | 0     | 0    | -945      | -945      |
| Estimated Outlays  | 0                                   | 40   | 575  | -725   | -9,245  | 615    | 2,170 | 1,895 | 1,720 | 1,090 | 705  | -8,740    | -1,160    |
| <b>Increases in Spending Subject to Appropriation</b>            |                                     |      |      |        |         |        |       |       |       |       |      |           |           |
| Estimated Authorization  | 0                                   | 1    | 1    | 1      | 1       | 1      | n.e.  | n.e.  | n.e.  | n.e.  | n.e. | 5         | n.e.      |
| Estimated Outlays  | 0                                   | 1    | 1    | 1      | 1       | 1      | n.e.  | n.e.  | n.e.  | n.e.  | n.e. | 5         | n.e.      |

All budget authority is estimated. FCC = Federal Communications Commission; n.e. = not estimated.

a. CBO expects that H.R. 3565 would increase costs for the Postal Service by an insignificant amount. Cash flows for the Postal Service are recorded in the federal budget in the Postal Service Fund and are classified as off-budget direct spending.

### Federal Communications Commission Auction Receipts

CBO’s estimates of proceeds of spectrum auctions are based on a variety of methods and considerations, including assessments of potential cash flows for various applications, historical trends in auction bids, and information from industry experts. CBO developed a range of estimates of potential gross proceeds that accounts for trends in the financial and market condition of potential bidders and for recent auction results.

Using that analysis, CBO estimates that enacting the bill would increase offsetting receipts (and thus decrease direct spending) from future spectrum auctions by \$13.6 billion over the 2023-2033 period. Those effects are shown in Table 2.



**Table 2.  
Estimated Changes in Direct Spending From Auction Receipts Under H.R. 3565**

|   | By Fiscal Year, Millions of Dollars |      |      |        |         |        |      |      |      |      |      | 2023-2028 | 2023-2033 |
|---|-------------------------------------|------|------|--------|---------|--------|------|------|------|------|------|-----------|-----------|
|   | 2023                                | 2024 | 2025 | 2026   | 2027    | 2028   | 2029 | 2030 | 2031 | 2032 | 2033 |           |           |
| <b>Increases or Decreases (-) in Direct Spending</b>          |                                     |      |      |        |         |        |      |      |      |      |      |           |           |
| <b>Extension of the FCC's Broad Auction Authority</b>         |                                     |      |      |        |         |        |      |      |      |      |      |           |           |
| Budget Authority  | 0                                   | 0    | -50  | -1,500 | -9,000  | 0      | 0    | 0    | 0    | 0    | 0    | -10,550   | -10,550   |
| Outlays   | 0                                   | 0    | -50  | -1,500 | -9,000  | 0      | 0    | 0    | 0    | 0    | 0    | -10,550   | -10,550   |
| <b>Auction of Frequencies Between 3100 and 3450 Megahertz</b> |                                     |      |      |        |         |        |      |      |      |      |      |           |           |
| Budget Authority  | 0                                   | 0    | 0    | 0      | -1,500  | -1,500 | 0    | 0    | 0    | 0    | 0    | -3,000    | -3,000    |
| Outlays   | 0                                   | 0    | 0    | 0      | -1,500  | -1,500 | 0    | 0    | 0    | 0    | 0    | -3,000    | -3,000    |
| <b>Auction Under the Spectrum Pipeline Act of 2015</b>        |                                     |      |      |        |         |        |      |      |      |      |      |           |           |
| Budget Authority  | 0                                   | 0    | 500  | -500   | 0       | 0      | 0    | 0    | 0    | 0    | 0    | 0         | 0         |
| Outlays   | 0                                   | 0    | 500  | -500   | 0       | 0      | 0    | 0    | 0    | 0    | 0    | 0         | 0         |
| <b>Total Changes</b>  |                                     |      |      |        |         |        |      |      |      |      |      |           |           |
| Budget Authority  | 0                                   | 0    | 450  | -2,000 | -10,500 | -1,500 | 0    | 0    | 0    | 0    | 0    | -13,550   | -13,550   |
| Outlays   | 0                                   | 0    | 450  | -2,000 | -10,500 | -1,500 | 0    | 0    | 0    | 0    | 0    | -13,550   | -13,550   |

All budget authority is estimated. FCC = Federal Communications Commission.

**Extension of the FCC's Broad Auction Authority.** Title V would reinstate the FCC's authority to auction licenses for commercial uses of the electromagnetic spectrum through September 30, 2026. That general authority, which expired on March 9, 2023, would allow the FCC to conduct auctions beyond those that have been specifically authorized under current law. Under the bill, CBO expects at least one auction would be held before the new expiration date. We estimate that actions under the new auction authority would generate offsetting receipts (net of amounts necessary to clear bands of spectrum occupied by incumbent users) of approximately \$10.6 billion over the 2023-2033 period.

CBO cannot predict which spectrum bands would be auctioned under the FCC's general auction authority. Instead, CBO uses both a top-down and a bottom-up approach to estimate a range of potential auction proceeds. Using information from past auctions and an analysis of industry demand and future needs, CBO estimates how much auction participants could be willing to pay for new spectrum offerings. CBO then analyzes the potential availability of spectrum for auction, as well as the costs associated with clearing the current users from the targeted frequencies, to estimate a range of potential market values of new offerings. CBO



cannot predict how policies that the FCC might adopt in the future (for example, those regarding auction procedures, minimum bids, and other matters) would affect net proceeds from future auctions.

Proceeds from spectrum auctions are recorded in the budget several months after the licenses are granted to the winning bidder; as a result, auction proceeds may be recorded after auction authority has lapsed. Based on historical information about the duration of large auctions and the licensing process, CBO estimates that \$1.5 billion in new auction proceeds would be recorded on the budget in 2026 and \$9.0 billion in 2027.

**Auction of Frequencies Between 3100 and 3450 Megahertz.** Title I would modify the parameters and planning procedures for an auction involving the band of frequencies between 3100 and 3450 megahertz (MHz). Authority for this auction was provided under the Infrastructure Investment and Jobs Act (IIJA) and is separate from the general auction authority that would be reestablished under title V. Based on expected industry demand, CBO projects that under current law this auction will generate net offsetting receipts of approximately \$15 billion over the 2023-2033 period. (That projection is incorporated in CBO's May 2023 baseline.) CBO estimates that the changes to this auction under title I would increase expected receipts by \$3 billion over the 2023-2033 period relative to our baseline projections.

**Auction Under the Spectrum Pipeline Act of 2015.** CBO expects that other provisions of title I would not affect the net receipts expected for the auction that was authorized under the Spectrum Pipeline Act of 2015. However, CBO estimates that the change in the auction timeline specified by H.R. 3565 would lead to proceeds accruing later than under current law, thus reducing receipts by \$500 million in 2025 and increasing receipts by the same amount in 2026.

### **Direct Spending of Auction Receipts**

H.R. 3565 would increase direct spending by \$12.4 billion by making amounts from anticipated auction proceeds available over the 2023-2033 period, as shown in Table 3.



**Table 3.  
Estimated Changes in Direct Spending of Auction Receipts Under H.R. 3565**

|  | By Fiscal Year, Millions of Dollars |      |      |       |       |       |       |       |       |       |      | 2023-<br>2028 | 2023-<br>2033 |
|--|-------------------------------------|------|------|-------|-------|-------|-------|-------|-------|-------|------|---------------|---------------|
|  | 2023                                | 2024 | 2025 | 2026  | 2027  | 2028  | 2029  | 2030  | 2031  | 2032  | 2033 |               |               |
| <b>Increases in Direct Spending</b>                          |                                     |      |      |       |       |       |       |       |       |       |      |               |               |
| <b>SATF—Next Generation 911</b>                              |                                     |      |      |       |       |       |       |       |       |       |      |               |               |
| Budget Authority   | 0                                   | 0    | 105  | 105   | 3,580 | 800   | 0     | 0     | 0     | 0     | 0    | 4,590         | 4,590         |
| Estimated Outlays  | 0                                   | 0    | 0    | 5     | 95    | 440   | 660   | 775   | 995   | 825   | 675  | 540           | 4,470         |
| <b>SATF—Enabling Middle Mile Broadband Infrastructure</b>    |                                     |      |      |       |       |       |       |       |       |       |      |               |               |
| Budget Authority   | 0                                   | 0    | 105  | 105   | 3,580 | 800   | 0     | 0     | 0     | 0     | 0    | 4,590         | 4,590         |
| Estimated Outlays  | 0                                   | 0    | 0    | 20    | 90    | 785   | 1,490 | 1,100 | 715   | 265   | 30   | 895           | 4,495         |
| <b>Treasury Borrowing—Supply Chain Reimbursement Program</b> |                                     |      |      |       |       |       |       |       |       |       |      |               |               |
| Budget Authority   | 3,080                               | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0    | 3,080         | 3,080         |
| Estimated Outlays  | 0                                   | 5    | 10   | 1,135 | 1,055 | 875   | 0     | 0     | 0     | 0     | 0    | 3,080         | 3,080         |
| <b>Treasury Borrowing—Minority Serving Institutions</b>      |                                     |      |      |       |       |       |       |       |       |       |      |               |               |
| Budget Authority   | 200                                 | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0    | 200           | 200           |
| Estimated Outlays  | 0                                   | 0    | 100  | 100   | 0     | 0     | 0     | 0     | 0     | 0     | 0    | 200           | 200           |
| <b>Spending From the SRF</b>                                 |                                     |      |      |       |       |       |       |       |       |       |      |               |               |
| Budget Authority   | 145                                 | 0    | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0    | 145           | 145           |
| Estimated Outlays  | 0                                   | 35   | 15   | 15    | 15    | 15    | 20    | 20    | 10    | 0     | 0    | 95            | 145           |
| <b>Total Changes</b>   |                                     |      |      |       |       |       |       |       |       |       |      |               |               |
| Budget Authority   | 3,425                               | 0    | 210  | 210   | 7,160 | 1,600 | 0     | 0     | 0     | 0     | 0    | 12,605        | 12,605        |
| Estimated Outlays  | 0                                   | 40   | 125  | 1,275 | 1,255 | 2,115 | 2,170 | 1,895 | 1,720 | 1,090 | 705  | 4,810         | 12,390        |

Budget authority for spending from the SRF is specified, all other budget authority is estimated. SATF = Spectrum Auction Trust Fund; SRF = Spectrum Relocation Fund.

**Spectrum Auction Trust Fund.** H.R. 3565 would authorize a portion of auction proceeds to be deposited into the SATF, which would be spent without further appropriation. Based on our projection of auction proceeds expected under current law and estimated under the bill, we estimate that \$4.6 billion would be made available for each of two activities through 2028.



*Next Generation 911 Systems.* The bill would authorize amounts deposited in the SATF to be used for grants for Next Generation 911 (NG911) systems, which are digital, Internet-protocol-based systems to allow emergency communications centers to better receive, process, and analyze 911 requests. According to a 2018 study on the costs of NG911, a nationwide NG911 system would cost between \$9.5 billion and \$12.7 billion.<sup>1</sup> Because of that level of demand, CBO estimates that enacting this provision would increase direct spending by the full amount the bill would make available for the program, \$4.6 billion. We estimate that \$4.5 billion would outlay over the 2023-2033 period and \$100 million after 2033. CBO anticipates that most funds would be used to purchase and maintain equipment to deploy, maintain, and ensure the cybersecurity of NG911 systems.

*Enabling Middle Mile Broadband Infrastructure Program.* The bill also would provide funding for the Enabling Middle Mile Broadband Infrastructure Program, which provides grants to states, tribes, and localities to build and expand Internet infrastructure. In October 2022, the NTIA announced that applicants requested more than \$5.5 billion for the current program, exceeding the 2021 appropriation of \$1 billion by approximately \$4.5 billion. Based on that demand, CBO estimates that enacting the provision would increase direct spending by \$4.5 billion over the 2023-2033 period. (Consistent with historical spending patterns, CBO expects that about \$100 million of that amount would not be spent.)

**Treasury Borrowing.** H.R. 3565 also would authorize the FCC to borrow roughly \$3.3 billion from the Treasury to fund two programs and would direct the agency to repay those amounts, without interest, from future auction proceeds. Because the FCC could spend those borrowed funds without future appropriation, CBO has estimated those costs here. The future auction proceeds necessary to repay those amounts are included in CBO's estimate of the FCC auction receipts, discussed above.

*Supply Chain Reimbursement Program.* H.R. 3565 would authorize borrowing of \$3.1 billion for the Supply Chain Reimbursement Program, which reimburses communications providers for the cost of removing equipment or technology produced by entities deemed to pose a risk to national security. The bill also would increase the amount the FCC is permitted to spend on the program from \$1.9 billion to \$5.0 billion. CBO estimates that enacting this provision would increase direct spending by \$3.1 billion over the 2023-2033 period. In July 2022, the FCC announced that applicants requested \$5.3 billion in program funding, exceeding the 2021 appropriation of \$1.9 billion by approximately \$3.4 billion. Based on that demand and on information from the FCC, CBO expects that the FCC would borrow the full authorized amount and begin spending those funds in 2024.

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1. See National Highway Traffic Safety Administration and National Telecommunications and Information Administration, *Next Generation 911 Cost Estimate A Report to Congress* (October 2018), "Next Generation 911 Cost Estimate A Report to Congress," <https://tinyurl.com/mr25w9b8>.





*Minority Serving Institutions Program.* The bill also would authorize borrowing of \$200 million to establish and carry out the Minority Serving Institutions Program, which provides grants to certain nonprofit organizations. Based on the pace of spending from the State Digital Equity Planning Grant Program under the Digital Equity Act (enacted as part of IJA), CBO estimates that this provision would increase direct spending by \$200 million over 2023-2033 period.

**Spectrum Relocation Fund.** H.R. 3565 would authorize direct spending of up to \$25 million from the Spectrum Relocation Fund (SRF) for planning related to the auction of the band of frequencies between 3100 and 3450 MHz. The bill also would transfer \$120 million from the SRF to the NTIA to establish and maintain an incumbent-informing capability, a mechanism to manage interference between new entrants and incumbent users of a shared spectrum band. Using information from the relevant agencies, CBO estimates that enacting those provisions would cost \$145 million over the 2023-2033 period.

### **Spending Subject to Appropriation**

CBO estimates that implementing the Policy and Plans Steering Group established under H.R. 3565 would cost \$5 million over the 2023-2028 period (those costs are shown in Table 1). The bill does not specify which agencies would participate, but CBO expects that the NTIA would appoint the 19 agencies that currently participate in the Interdepartment Radio Advisory Committee. CBO expects that the FCC and NTIA would contribute one full-time employee each to administer the steering group annually and that each of the other participating agencies would contribute one part-time employee annually.<sup>2</sup>

The bill also would establish new notification and publishing requirements for the FCC and NTIA with respect to actions or rules affecting the spectrum. Using information from the affected agencies, CBO estimates that implementing those requirements would cost less than \$500,000 over the 2023-2028 period.

Any spending necessary to implement those two provisions would be subject to the availability of appropriated funds. However, the FCC is authorized to collect fees each year sufficient to offset the appropriated costs of its regulatory activities; therefore, CBO estimates that the net cost to the commission would be negligible, assuming appropriation actions consistent with that authority.

The FCC also incurs administrative expenses associated with conducting spectrum auctions and retains a portion of auction proceeds to cover those costs in an escrow account. Funds in the escrow account are made available for spending through annual appropriation acts. Amounts retained by the FCC and made available in a future appropriation act will offset

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2. CBO expects that the Postal Service's participation in the Policy and Plans Steering Group would increase its costs by an insignificant amount. Cash flows for the Postal Service are recorded in the federal budget in the Postal Service Fund and are classified as off-budget direct spending.





each other over the 2023-2033 period. CBO therefore estimates that the net effect on the budget would be negligible.

### **Uncertainty**

Estimates of net receipts from spectrum auctions are very uncertain, largely because they depend on many factors that can vary over time and, further, depend on the frequencies to be auctioned. CBO's estimate of spectrum proceeds under this bill therefore accounts for both a range of potential winning bids as well as an estimated probability that an auction will occur in a given timeframe. Both elements of the estimate are subject to substantial uncertainty; thus, spectrum auction proceeds and associated spending could be higher or lower than CBO estimated.

Key sources of uncertainty include:

- Variability in market conditions, technologies, availability of spectrum to be auctioned, and market perception of the quality of the spectrum offered. The amounts prospective bidders will be willing to pay for licenses would depend on many future market factors.
- The competitiveness of an auction, the timing of other auctions, and the financial and strategic interests of the participants. CBO also cannot predict purposes for which spectrum would be used that could affect prospective bidders' willingness to pay.
- The probability and timing of future spectrum auctions, which could vary depending on the complexity of clearing encumbered bands, market demand, and barriers to or incentives for reallocation, among other factors.
- Costs to clear or share currently encumbered spectrum, which can vary across agencies and among frequencies to be cleared, would depend on how the spectrum is being used and the types of equipment employed.

### **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. The net changes in outlays that are subject to those pay-as-you-go procedures are shown in Table 4.



**Table 4.**  
**CBO’s Estimate of the Statutory Pay-As-You-Go Effects of H.R. 3565, the Spectrum Auction Reauthorization Act of 2023, as Ordered Reported by the House Committee on Energy and Commerce on May 24, 2023**

|                       | By Fiscal Year, Millions of Dollars                |      |      |      |        |      |       |       |       |       |      | 2023-2028 | 2023-2033 |
|-----------------------|--|------|------|------|--------|------|-------|-------|-------|-------|------|-----------|-----------|
|                       | 2023   | 2024 | 2025 | 2026 | 2027   | 2028 | 2029  | 2030  | 2031  | 2032  | 2033 |           |           |
|                       | <b>Net Increase or Decrease (-) in the Deficit</b> |      |      |      |        |      |       |       |       |       |      |           |           |
| Effect on the Deficit | 0  | 40   | 575  | -725 | -9,245 | 615  | 2,170 | 1,895 | 1,720 | 1,090 | 705  | -8,740    | -1,160    |

### Increase in Long-Term Net Direct Spending and Deficits

CBO estimates that enacting H.R. 3565 would not increase net direct spending by more than \$2.5 billion in any of the four consecutive 10-year periods beginning in 2034.

CBO estimates that enacting H.R. 3565 would not increase on-budget deficits by more than \$5 billion in any of the four consecutive 10-year periods beginning in 2034.

### Mandates

If the FCC increases annual fee collections to offset the costs of implementing provisions in the bill, H.R. 3565 would increase the cost of an existing private-sector mandate on entities required to pay those fees. CBO estimates that the incremental cost of the mandate would be small and would fall well below the annual threshold established in the Unfunded Mandates Reform Act for private-sector mandates (\$198 million in 2023, adjusted annually for inflation).

The bill contains no intergovernmental mandates.

### Estimate Prepared By

Federal Costs:

- David Hughes (Federal Communications Commission and National Telecommunications and Information Administration)
- Willow Latham-Proença (spectrum auctions)

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## **Estimate Reviewed By**

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## **Estimate Approved By**

A handwritten signature in black ink, appearing to read "Phillip L. Swagel".

Phillip L. Swagel  
Director, Congressional Budget Office