

# How CBO Acquires Data, Evaluates Its Estimates, and Makes Its Work Transparent

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# **The Role of the Congressional Budget Office (CBO)**

# **CBO Was Established to Give the Congress a Stronger Role in Budget Matters**

The agency was created under the Congressional Budget and Impoundment Control Act of 1974 (often called the Budget Act), which also established the House and Senate Budget Committees and instituted a formal Congressional budget process.

CBO's chief responsibility under the Budget Act is to help the Budget Committees with matters under their jurisdiction. The agency follows processes that are specified in statute or that it has developed in concert with those committees and Congressional leadership.

The agency provides analysis of budgetary and economic issues that is objective, nonpartisan, and timely. It does not make policy recommendations.

CBO's work is available to the Congress and the public on the agency's website, [www.cbo.gov](http://www.cbo.gov).

# CBO Provides Baseline Budget and Economic Projections

CBO prepares and periodically updates a 10-year budget baseline that serves as a benchmark for measuring the effects of proposed legislation.

The baseline reflects the assumption that current laws governing spending and revenues generally remain unchanged, and it relies on CBO's forecasts of key economic factors.

CBO's Baseline Budget Projections, by Category

	Actual, 2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Total	
													2023– 2027	2023– 2032
<b>In Billions of Dollars</b>														
<b>Revenues</b>														
Individual income taxes	2,044	2,623	2,579	2,542	2,539	2,771	2,970	3,049	3,170	3,301	3,436	3,582	13,400	29,938
Payroll taxes	1,314	1,465	1,572	1,625	1,669	1,726	1,786	1,853	1,923	1,995	2,072	2,150	8,378	18,372
Corporate income taxes	372	395	456	478	483	473	457	461	470	480	491	505	2,347	4,755
Other	317	354	283	279	290	310	336	352	370	385	403	424	1,498	3,433
<b>Total</b>	<b>4,047</b>	<b>4,836</b>	<b>4,890</b>	<b>4,924</b>	<b>4,982</b>	<b>5,280</b>	<b>5,548</b>	<b>5,716</b>	<b>5,934</b>	<b>6,161</b>	<b>6,402</b>	<b>6,662</b>	<b>25,623</b>	<b>56,498</b>
On-budget	3,095	3,782	3,754	3,737	3,753	4,008	4,229	4,347	4,514	4,689	4,875	5,078	19,481	42,984
Off-budget <sup>a</sup>	952	1,054	1,136	1,186	1,228	1,272	1,320	1,369	1,420	1,472	1,527	1,584	6,142	13,514
<b>Outlays</b>														
Mandatory	4,834	3,751	3,674	3,656	3,834	4,032	4,206	4,542	4,564	4,911	5,162	5,461	19,401	44,041
Discretionary	1,636	1,722	1,758	1,798	1,862	1,930	1,996	2,057	2,096	2,155	2,209	2,261	9,344	20,122
Net interest	352	399	442	525	604	681	756	842	925	1,007	1,099	1,194	3,009	8,075
<b>Total</b>	<b>6,822</b>	<b>5,872</b>	<b>5,874</b>	<b>5,980</b>	<b>6,300</b>	<b>6,643</b>	<b>6,958</b>	<b>7,441</b>	<b>7,585</b>	<b>8,074</b>	<b>8,469</b>	<b>8,915</b>	<b>31,754</b>	<b>72,238</b>
On-budget	5,819	4,794	4,688	4,705	4,942	5,208	5,436	5,826	5,872	6,258	6,546	6,887	24,979	56,368
Off-budget <sup>a</sup>	1,004	1,077	1,186	1,275	1,358	1,436	1,521	1,614	1,713	1,816	1,923	2,029	6,775	15,870
<b>Total Deficit</b>	<b>-2,775</b>	<b>-1,036</b>	<b>-984</b>	<b>-1,056</b>	<b>-1,318</b>	<b>-1,364</b>	<b>-1,409</b>	<b>-1,725</b>	<b>-1,651</b>	<b>-1,912</b>	<b>-2,067</b>	<b>-2,253</b>	<b>-6,131</b>	<b>-15,740</b>
On-budget	-2,724	-1,013	-934	-968	-1,189	-1,200	-1,207	-1,480	-1,358	-1,568	-1,671	-1,808	-5,498	-13,384
Off-budget <sup>a</sup>	-52	-23	-50	-88	-130	-164	-202	-245	-293	-344	-396	-445	-633	-2,356
Primary Deficit <sup>b</sup>	-2,423	-637	-542	-531	-714	-683	-653	-883	-726	-905	-969	-1,060	-3,122	-7,665
Debt Held by the Public	22,284	24,173	25,193	26,217	27,561	28,925	30,326	32,105	33,760	35,808	37,949	40,213	n.a.	n.a.

Data source: Congressional Budget Office, *The Budget and Economic Outlook: 2022 to 2032* (May 2022), [www.cbo.gov/publication/57950](https://www.cbo.gov/publication/57950). For historical data on the budget and the economy, see [www.cbo.gov/data/budget-economic-data](https://www.cbo.gov/data/budget-economic-data).

# CBO Prepares Estimates of the Effects of Legislative Proposals

CBO is required to produce a cost estimate for nearly every bill approved by a full Congressional committee. The agency produces 600 to 800 cost estimates each year.

Those estimates include the impact of federal mandates on state, local, and tribal governments.

CBO also fulfills thousands of requests for technical assistance as lawmakers draft legislation.

Furthermore, CBO tracks appropriation actions.



September 23, 2022

<b>H.R. 3304, Advancing Uniform Transportation Opportunities for Veterans Act</b> As ordered reported by the House Committee on Veterans' Affairs on September 21, 2022			
By Fiscal Year, Millions of Dollars	2022	2022-2027	2022-2032
Direct Spending (Outlays)	0	167	-43
Revenues	0	0	0
Increase or Decrease (-) in the Deficit	0	167	-43
Spending Subject to Appropriation (Outlays)	0	0	0
Statutory pay-as-you-go procedures apply?	Yes	<b>Mandate Effects</b>	
Increases on-budget deficits in any of the four consecutive 10-year periods beginning in 2032?	< \$5 billion	Contains intergovernmental mandate?	No
		Contains private-sector mandate?	No

# CBO Analyzes the President's Budget Each Year

CBO uses its own projections of economic and technical factors to determine the budgetary effects of the President's budget.

CBO compares its estimates of the President's budget to its baseline and to the Administration's estimates.

Typically, CBO publishes its analysis within four to five weeks of the release of the President's budget and provides detailed projections to the Budget and Appropriations Committees.

## Differences Between CBO's and the Administration's Estimates of the President's Budget

Billions of Dollars

	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Total	
												2023–	2023–
												2027	2032
	<b>Administration's Estimate</b>												
Deficit Under the President's Budget	-1,415	-1,154	-1,201	-1,330	-1,328	-1,352	-1,533	-1,443	-1,614	-1,682	-1,784	-6,364	-14,421
	<b>Differences Between CBO's and the Administration's Estimates</b>												
Revenues <sup>a</sup>	399	350	215	100	49	19	-81	-115	-156	-202	-228	731	-51
Outlays <sup>b</sup>													
Mandatory	-49	18	-20	-65	-84	-110	-133	-203	-208	-215	-248	-261	-1,268
Discretionary	28	39	-90	-54	-34	-27	-21	-41	-38	-41	-41	-165	-347
Net interest	42	46	45	33	21	9	10	13	16	25	34	153	251
<b>Total</b>	<b>20</b>	<b>103</b>	<b>-65</b>	<b>-86</b>	<b>-98</b>	<b>-127</b>	<b>-145</b>	<b>-230</b>	<b>-230</b>	<b>-231</b>	<b>-255</b>	<b>-273</b>	<b>-1,364</b>
Deficit <sup>c</sup>	379	246	280	185	147	146	64	115	74	29	27	1,004	1,313
	<b>CBO's Estimate</b>												
Deficit Under the President's Budget	-1,036	-908	-921	-1,145	-1,182	-1,205	-1,469	-1,328	-1,540	-1,653	-1,758	-5,360	-13,108



# **Accessing Data From Federal Agencies**

# To Fulfill Its Mission, CBO Accesses a Wide Array of Data From Federal Agencies

- **Publicly available information** is generally easy to access and is usually well-documented.
- Other information is acquired upon request through **informal cooperation** with federal agencies.
- CBO's analysts sometimes use information obtained through **formal agreements** with federal agencies.



# Three Different Types of Legal Authority Help CBO Obtain Information From Federal Agencies

**General** authority derives from:

- The Budget Act, section 201(d);
- The Federal Credit Reform Act of 1990; and
- Requirements of the annual budget process.

**Specific** authority derives from:

- The Internal Revenue Code (for using tax information for long-term models of Social Security and Medicare programs);
- The Emergency Economic Stabilization Act of 2008, section 201 (for information related to the Troubled Asset Relief Program); and
- The Social Security Act, sections 1927 and 1150 (for information about certain drug prices, rebates, and discounts).

**Other** authority derives from CBO's collaboration with the Joint Committee on Taxation and other federal agencies.

# **Restricted-Access Data Are Critical to Some Key Models Used in Producing CBO's Estimates**

When arranging to use restricted-access data, CBO generally aims for:

- Continual and long-running access;
- Secure access from CBO's offices (or from home, in the work-from-home environment); and
- Clear and well-understood processes that are similar among agencies.

# **Evaluating the Accuracy of CBO's Budget Projections, Economic Forecasts, and Cost Estimates**

# Evaluating Evidence and Revisiting Estimates Is an Ongoing Process

CBO relies on the best available:

- Data,
- Research,
- Experts, and
- Understanding of current and proposed law.

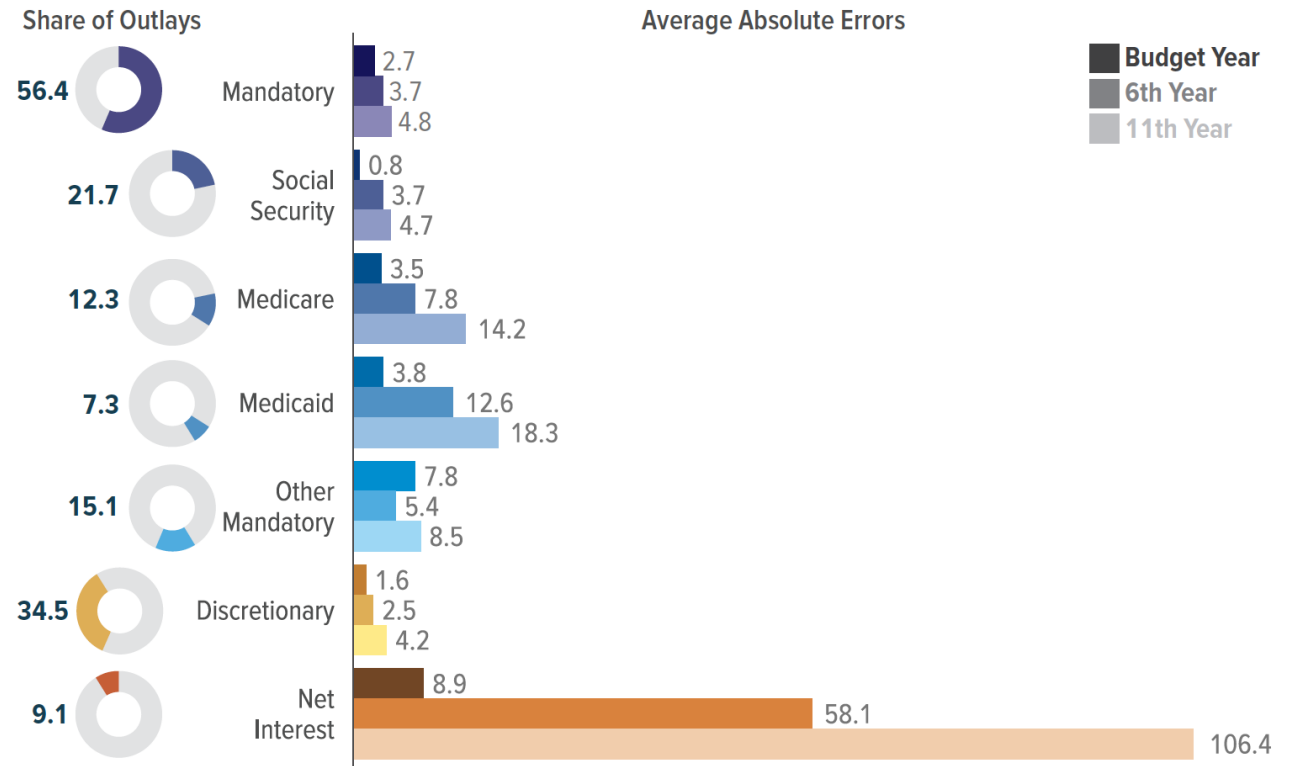
The agency revisits its baseline estimates every year and adjusts them to reflect new information.

# CBO Frequently Reports on the Accuracy of Its Budget Projections

## Examples:

- [The Accuracy of CBO's Budget Projections for Fiscal Year 2022](#) (annual report)
- [An Evaluation of CBO's Projections of Outlays From 1984 to 2021](#) (periodic report)
- [An Evaluation of CBO's Past Revenue Projections](#) (periodic report)
- [An Evaluation of CBO's Past Deficit and Debt Projections](#) (periodic report)

Share of Total Outlays and Average Absolute Errors, by Category and Subcategory  
Percent

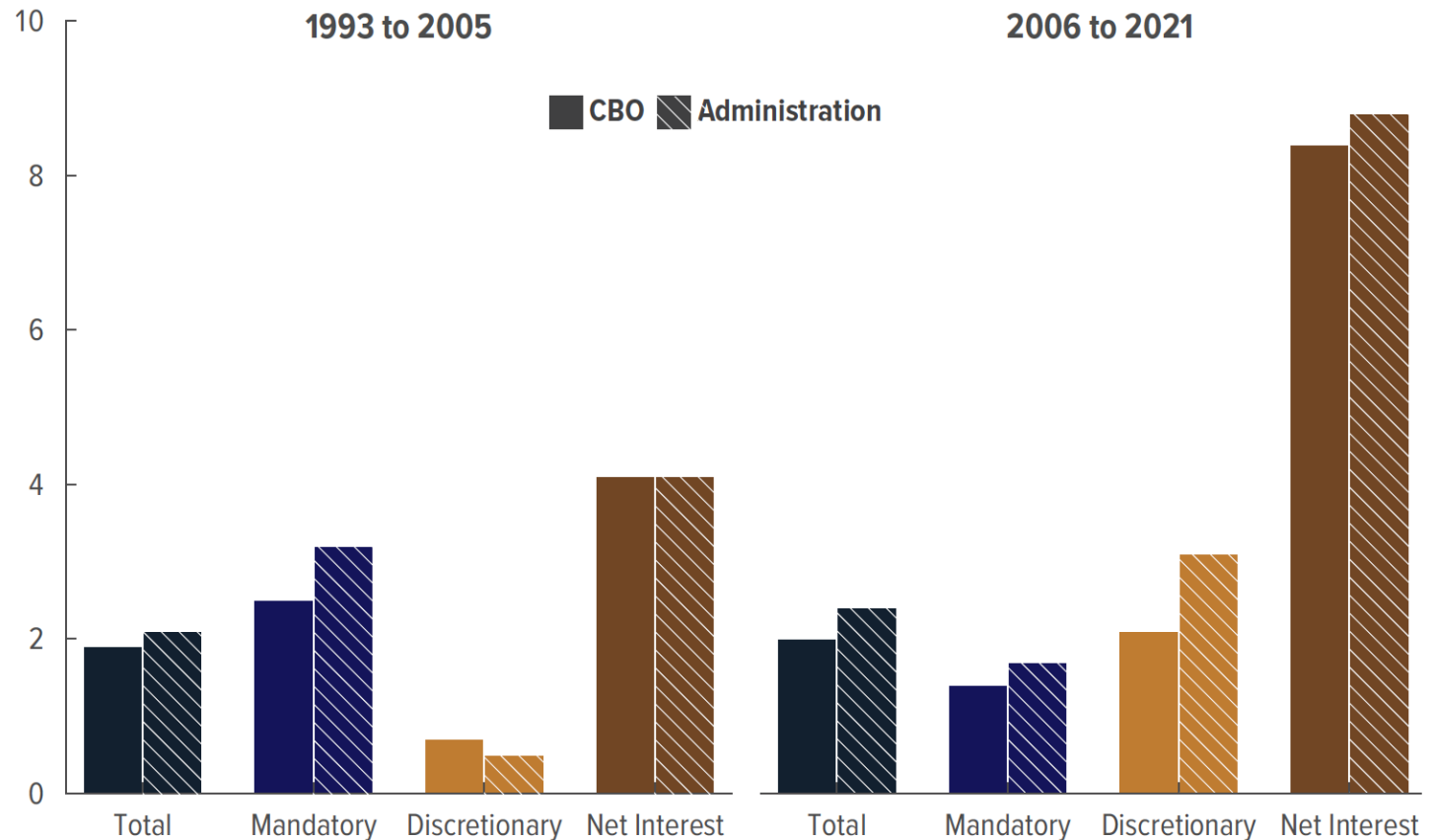


# CBO Compares Its Budget Projections With Those of the Administration

CBO evaluates the quality of its budget projections over various time horizons.

The Administration, however, does not publish data about the accuracy of its projections beyond the budget year (typically the fiscal year beginning several months after the projections were made).

Comparison of Average Errors in CBO's and the Administration's Budget-Year Projections of Outlays  
Percent



# CBO Assesses Its Economic Forecasts and Its Projections for Specific Programs

## Economic Forecast:

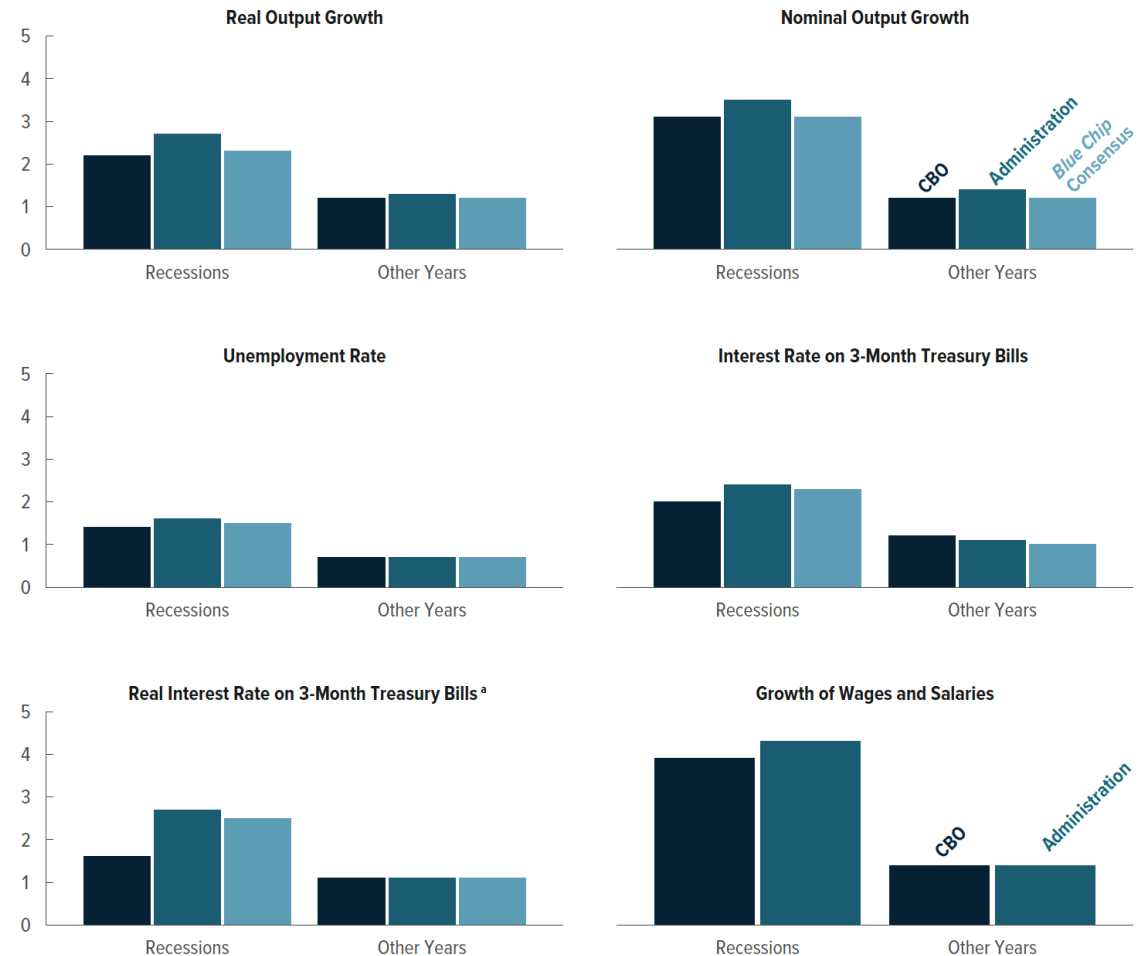
- [CBO's Economic Forecasting Record: 2021 Update](#) (periodic report)

## Specific Programs:

- [CBO's Projections of Federal Health Care Spending](#)
- [A Review of CBO's Estimate of the Effects of the Recovery Act on SNAP](#)
- [A Review of CBO's Estimate of Spending From the Department of Defense's Medicare-Eligible Retiree Health Care Fund](#)

Root Mean Square Errors of Two-Year Forecasts Made Near Business Cycle Peaks

Percentage Points



# Assessing the Accuracy of Cost Estimates Can Be Challenging

That is because:

- Sometimes the proposed legislation was not enacted,
- The enacted version of the legislation was significantly different, or
- Spending for a legislative initiative was rolled into other spending.

Moreover,

- It is often unclear what spending would have been if no law was enacted, and
- Agencies determine the regulations and rules for implementing legislation that is enacted.



# **Providing Transparent and Accessible Work**

# CBO Makes Its Work Transparent in Different Ways

- Testifying and publishing answers to questions
- Explaining analytic methods
- Releasing data
- Analyzing the accuracy of its estimates
- Comparing current estimates with previous estimates
- Comparing its estimates with those of other organizations
- Estimating the effects of policy alternatives
- Characterizing uncertainty of estimates
- Creating data visualizations
- Conducting outreach

# CBO's Products Are Accessible

All of CBO's reports and cost estimates are shared widely and made available on the agency's website.

CBO publishes interactive graphics, including graphics accompanying reports that make key takeaways more easily accessible.

CBO produces versions of its reports that are tailored for reading on mobile devices and web browsers.

## How Increasing the Federal Minimum Wage Could Affect Employment and Family Income

This interactive tool—developed and updated by the Congressional Budget Office—allows users to explore the effects of policies that would increase the federal minimum wage, which is \$7.25 per hour and has not changed since 2009. The default option in this interactive tool is based on the [Raise the Wage Act of 2021 \(S. 53\)](#), which CBO analyzed in [The Budgetary Effects of the Raise the Wage Act of 2021](#).

For the default policy shown here, the standard minimum wage reaches \$15 per hour in 2027, four years after the first incremental increase. The subminimum wage for tipped workers reaches parity with the regular minimum wage two years later. After reaching their targets, both minimums are indexed to changes in median hourly wages.

Users can also create custom policy options to examine how different approaches to changing the minimum wage would affect people's earnings, employment, family income, and poverty. In general, increasing the federal minimum wage would raise the earnings and family income of most low-wage workers, lifting some families out of poverty—but it would cause other low-wage workers to become jobless, and their family income would fall.

**MINIMUM WAGE** [?]  
 \$15

**MINIMUM CASH WAGE FOR TIPPED WORKERS** [?]  
 No change (\$2.13)  
 Half the regular minimum  
 Same as the regular minimum

**TARGET YEAR FOR FULL IMPLEMENTATION** [?]  
 2027

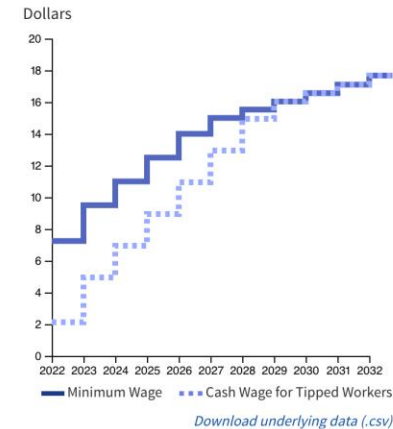
**ADJUSTMENTS AFTER TARGET YEAR** [?]  
 None  
 Indexed to CPI  
 Indexed to median wage

[Reset to the policy based on the Raise the Wage Act of 2021 \(S. 53\)](#)

### OPTION

Raise the minimum wage to \$15 by 2027 and gradually raise the tipped cash minimum to be the same as the regular minimum. Thereafter, index both wages to the median wage. Eliminate the subminimums for teenagers and disabled workers.

### Minimum Hourly Wages



### Change in Employment in an Average Week

