



The Congressional Budget Office's Request for Appropriations for Fiscal Year 2022

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The Congressional Budget Office's Request for Appropriations for Fiscal Year 2022

Overview of CBO's Budget Request for 2022

The Congressional Budget Office requests appropriations of \$61 million for fiscal year 2022. Of that amount, 91 percent would be for pay and benefits; 6 percent would be for information technology (IT), including purchases of commercial data; and 3 percent would be for training, expert consultants, office supplies, and other items. The requested amount represents an increase of \$3.7 million, or 6.4 percent, from the \$57.3 million provided to CBO for 2021.

That increase has four components:

- \$1.3 million to cover increases in current employees' salary and benefits;
- \$1.4 million to fully fund seven new staff members hired in 2021 and to fund the early replacement of staff members who plan to depart in 2022 (nine full-time-equivalent positions, or FTEs);
- \$0.6 million to fund IT enhancements to increase security and to help a workforce divided between CBO's offices and remote locations work efficiently; and
- \$0.4 million to pay for four new staff members (two FTEs) who would provide the Congress with more analysis of infrastructure, energy, and climate-change issues. (Those employees would be hired partway through the year, so the amount requested is half the cost of employing them for a full year.)

That increase in staff would allow CBO to become even more responsive to the Congress's need for analysis. During the past year, CBO's current staffing level has helped it respond to many unusual challenges posed by the 2020–2021 coronavirus pandemic. Those responses have included providing timely technical assistance with substantial pandemic-related legislation; publishing

economic and budget projections soon after the pandemic began to support the Congress as it was considering that legislation; and providing the Congress with reports and analyses on a wide range of topics while moving entirely to a remote work environment. Because so much of CBO's budget is devoted to personnel costs, if actual funding proves markedly less than the proposed amount, CBO will have to shrink its staff, affecting its ability to be transparent and responsive.

CBO's Budget Request and Its Consequences for Staffing and Output

In fiscal year 2022, CBO will continue its mission of providing objective, insightful, clearly presented, and timely budgetary and economic information to the Congress. The \$61 million requested would be used mostly for salaries and benefits for personnel.

Funding Request for Personnel Costs and Consequences for Staffing

CBO requests \$55.2 million for salary and benefits to support 275 FTEs. That amount represents an increase of \$3.1 million, or 5.9 percent, from the \$52.1 million provided to CBO for fiscal year 2021.

Of the total requested amount:

- \$39.6 million would cover salaries—an increase of \$2.6 million, or 7 percent, from the amount provided for 2021. The requested increase would fund the hiring of four new staff members and fully fund staff members hired at various times throughout 2021. It would also provide for performance-based salary increases for current staff in 2022 and an across-the-board increase of 2.6 percent for employees earning less than \$100,000. (That group of employees would also be eligible for performance-based increases, whereas employees earning \$100,000 or more

Table 1.

Products by the Congressional Budget Office, Calendar Years 2020 to 2022

Type of Product	2020, Actual	2021, Estimate	2022, Estimate
Formal Cost Estimates and Mandate Statements	546	700	700
Fulfilled Requests for Technical Assistance	Thousands	Thousands	Thousands
Scorekeeping Tabulations	About 100	100	100
Analytic Reports, Working Papers, and Testimony ^a	78	70	70

a. Includes CBO's major recurring reports providing budget and economic projections and analyses, the *Monthly Budget Review*, reports on a broad range of topics, testimonies, answers to questions for the record following a Congressional hearing, and working papers providing technical descriptions of official CBO analyses or presenting independent research by CBO analysts.

would be eligible to receive only performance-based increases.)

- \$15.6 million would fund benefits—an increase of \$0.5 million, or 3.6 percent, from the amount provided for 2021. The requested increase would cover an increase in the cost of federal benefits and fund benefits for the four new staff members.

Funding Request for Nonpersonnel Costs

CBO requests \$5.8 million for costs other than personnel. Those funds would cover current IT operations—such as software and hardware maintenance, software development, communications, and purchases of commercial data and equipment—and would pay for training, expert consultants, office supplies, travel, inter-agency agreements, facilities support, printing and editorial support, financial management operations (including auditing the agency's financial statements), subscriptions to library services, and other items.

The requested amount is \$0.6 million, or 11 percent, larger than the amount provided for 2021. That funding would enable such enhancements as improving CBO's ability to assess, detect, and recover from internal and external cyber threats; continuing to improve computing capabilities for many staff by shifting their workstations into cloud-based systems; and enhancing users' ability to conduct remote teleconferences.

Consequences for Output

The requested amount of funding would allow CBO to do the following for the Congress (see Table 1):

- Provide roughly 700 formal cost estimates, most of which will include both estimates of federal costs and

assessments of the cost of mandates imposed on state, local, and tribal governments or the private sector;

- Fulfill thousands of requests for technical assistance, typically from committees and Members of Congress seeking a clear picture of the potential budgetary impact of proposals and variants of proposals before they introduce or formally consider legislation;
- Produce about 100 scorekeeping reports and estimates, including account-level estimates for individual appropriation acts at all stages of the legislative process, as well as summary tables showing the status of discretionary appropriations (by appropriations subcommittee) and running totals on a year-to-date basis;
- Publish about 70 analytic reports and papers—generally required by law or prepared in response to requests from the Chairs and Ranking Members of key committees—about the outlook for the budget and the economy, major issues affecting that outlook under current law, the budgetary effects of policy proposals that could change the outlook, the details of the federal budget process, and a broad range of related budgetary and economic topics in such areas as health care, defense policy, Social Security, and climate change; and
- Publish blog posts, chart books, interactive tools, presentations, slide decks, testimonies, and questions for the record to bring CBO's work to a wide audience and to increase the transparency of CBO's analysis and methods.

The demands on the agency remain intense and strain its resources in many areas. For example, the workload associated with analyzing appropriation bills and



related amendments continues to be heavy. Also, over the past year, CBO devoted extensive resources to analyzing legislation that responded to the pandemic and to sudden changes in the economy. In addition to those extraordinary efforts, CBO devoted resources to producing important reports about the budgetary effects of a single-payer health care system, a variety of defense-related issues, student loans, transparency at CBO, the effects of recapitalizing Fannie Mae and Freddie Mac, veterans' income, and other topics. CBO regularly consults with committees and the Congressional leadership to ensure that its resources are focused on the work that is of highest priority to the Congress. Even with high productivity by a dedicated staff, CBO expects that it will not be able to produce as many estimates and other analyses as committees, leadership, and individual Members request.

CBO's Role in Support of the Congress

CBO was established under the Congressional Budget Act of 1974 to provide information that would support the Congressional budget process and help the Congress make effective budget and economic policy. CBO's work follows processes specified in that law and subsequent laws or developed over time by the agency in concert with the budget committees and the Congressional leadership. The agency's chief responsibility under the Budget Act is to help the budget committees with the matters under their jurisdiction. CBO also supports other Congressional committees—particularly the Appropriations, Ways and Means, and Finance Committees, as the Budget Act requires—and the leadership of the House and Senate.

The agency is committed to providing information that is:

- Objective and insightful—representing the consensus of experts from around the country and the diversity of their views, and applying the best new evidence as well as the lessons of experience;
- Timely—responding as quickly as possible to the needs of the Congress; and
- Clearly presented and explained—so that policymakers and analysts understand the basis for the agency's findings and have the opportunity to question the analysis and methods used.

CBO strives to present the likely budgetary and economic consequences of proposals being considered by the Congress so that lawmakers can make informed

policy choices. In keeping with CBO's mandate to provide analysis that is objective and impartial, the agency makes no policy recommendations.

The agency employs analysts with many types of expertise who support the Congress in collaboration with managers and support staff. At the beginning of January 2021, 265 positions at CBO were filled (see Table 2). Health care was the field that occupied the most analysts.

CBO's Goals for 2021 and 2022

In 2021 and 2022, to carry out its mission of serving the Congress, CBO will focus on meeting four goals:

- Providing the Congress with budget and economic information that is objective and insightful;
- Strengthening the agency's ability to respond to the Congress's requests for information in a timely way;
- Enhancing the transparency of the agency's work; and
- Improving the agency's internal operations.

Providing Budget and Economic Information That Is Objective and Insightful

In 2021 and 2022, CBO will ensure, as it has throughout its history, that its work is objective and insightful. The agency will continue its practice of making no policy recommendations and will continue to strive to present the likely consequences of alternative policy proposals.

Many of the products that CBO will produce in the next two years are specified by statute, including the annual report on the outlook for the budget and the economy and cost estimates for bills reported by committees. The remainder of CBO's analyses address issues being considered by the Congress, provide background information on budgetary and economic conditions that are relevant for the consideration of legislation, or explain the tools that the agency uses in making projections and estimates. Accordingly, the specific projects that CBO undertakes this year and next will depend on CBO's budget and on requests from Congressional committees and leadership. CBO regularly consults with Members and staff about what topics and types of analyses would be most valuable to the Congress, and the agency responds as rapidly as possible to Congressional interest.

The analyses requested by the Congress at times involve new and complex issues; even for recurring issues, a constantly changing context creates new challenges.

Table 2.

Allocation of CBO Staff, January 2021

	Number of Staff
Principal Areas for Analysts	
Health	50
Education, Immigration, Income Security, Labor, and Retirement	29
National Security, Veterans' Programs, and International Affairs	24
Taxation	20
Energy, Environment, Natural Resources, and Transportation	18
Macroeconomics	18
Finance and Housing	12
Budget Outlook	10
Appropriations	7
Mandates	6
Commerce, Justice, Science, and General Government	3
Principal Types of Activities for Other Staff	
Information Technology	15
Editing and Publishing	13
Human Resources, Financial Management, and Other Support	12
General Management	9
Clerical Support	8
Website	5
Legal Services	4
Interns	2
Total	265

Numbers are positions filled. Although staff are assigned to a primary type of analysis or activity in this table, they often work in many areas.

CBO expends substantial resources to understand the substance underlying policy issues and estimate the budgetary and economic impact of legislative proposals. Many of CBO's analyses involve assembling evidence from numerous sources, synthesizing the implications of that evidence, and building models to quantify effects of specific proposals and variations of them. To be ready to provide timely responses to requests, the agency makes ongoing investments in that process. For example, CBO is currently improving its capability to analyze the effects of proposed climate-change legislation on the economy and the federal budget. CBO is also improving its capability to analyze the effect of proposed legislation on people in different demographic and income groups.

PROVIDING FORMAL COST ESTIMATES AND MANDATE STATEMENTS

CBO will fulfill the statutory requirement to provide estimates of the cost of bills reported by committees. Most cost estimates will include estimates of the effects of intergovernmental and private-sector mandates.

FULFILLING REQUESTS FOR TECHNICAL ASSISTANCE

CBO will provide technical assistance to committees seeking information on the budgetary impact of proposals before they formally consider or seek to amend legislation.

PRODUCING ESTIMATES OF APPROPRIATION BILLS

CBO will estimate the budgetary impact of appropriation bills and provide regular status reports on discretionary appropriations and on the direct spending and revenue effects of legislation.

PUBLISHING REPORTS, WORKING PAPERS, AND TESTIMONY ABOUT THE BUDGET AND ECONOMY

CBO will produce comprehensive reports about the outlook for the budget and the economy, describing the agency's baseline budget and economic projections and the basis for them. Working papers will provide additional detail on the budgetary and economic trends underlying the projections. For example, CBO's analysts will prepare a working paper analyzing prescription drug prices and another exploring inflation expectations. In

addition, CBO will estimate the effects of the President's budgetary proposals on the budget and the economy.

CBO will also report on the long-term budget outlook, examining how Social Security, Medicare, Medicaid, and other parts of the federal budget are likely to be affected over the coming decades by the aging of the population and growth in the cost of health care per person. And CBO will assess other long-term trends affecting the economic outlook and the budget. For instance, CBO's analysts will examine the fertility, mortality, and demographic components in its longer-term budget and economic models.

Furthermore, the agency will provide in-depth analyses of various issues, responding to the interests and concerns of Congressional committees and leadership. Those analyses will address broad budget issues and an array of other topics, including health care, income security, education, macroeconomic conditions and problems, trade, financial markets, credit programs, taxes, national security, energy, climate change, and infrastructure.

Strengthening Responsiveness

CBO seeks to provide information at the time when it is most useful to the Congress. Depending on its purpose, that information takes a variety of forms, such as cost estimates, background information, and technical assistance. Whenever it is practicable, CBO completes formal cost estimates before legislation comes to a floor vote. In addition, the agency works to provide technical assistance, reports, and other information to policymakers and their staff during earlier stages of the legislative process.

Beginning in fiscal year 2019, the Congress increased CBO's budget in part to allow the agency to implement a plan to strengthen its responsiveness to the Congress. To carry out that plan, CBO has expanded staffing in high-demand areas, such as health care and immigration. It has increased its use of assistant analysts, who can move from one topic to another to support more senior analysts when demand surges for analysis of a particular topic or when additional assistance is needed for a complicated estimate. In addition, CBO is engaging expert consultants in complex areas, such as health policy, economic forecasting, and climate-related research. Finally, the agency is continuing to expand its use of team approaches for large and complicated projects. That approach has been particularly effective in enabling CBO to produce timely analysis of legislation involving health care.

CBO's goal is to increase the number of staff with overlapping skills within and across teams. In some cases, those skills will consist of expertise related to particular topics, such as defense or transportation. In other cases, they will be more technical, such as the ability to design and improve simulation models. In a similar vein, CBO plans to invest additional resources in bolstering analysts' ability to coordinate work that requires expertise from across the agency. Another of CBO's goals is to dedicate more senior analysts to being responsible for projects that span multiple subject areas.

The small budgetary increase that CBO is requesting would allow it to maintain its efforts to be responsive, particularly in three important areas of analysis. In 2021 and 2022, CBO plans to hire additional staff who will increase the agency's expertise and modeling capability in the areas of infrastructure, energy, and climate change—areas in which CBO expects the Congress to show increased interest.

Enhancing Transparency

CBO works hard to make its analysis transparent and plans to strengthen those efforts, building on the increased emphasis that it has placed on transparency over the past several years. In 2021 and 2022, many of CBO's employees will spend part of their time on efforts to make the agency's analysis transparent.

TESTIFYING AND PUBLISHING

ANSWERS TO QUESTIONS

In 2021 and 2022, CBO expects to testify about its baseline projections and other topics as requested by the Congress. That work will involve presenting oral remarks, answering questions at hearings, and presenting written statements, as well as publishing answers to Members' questions for the record. CBO will continue to address issues raised as part of the oversight provided by the budget committees and the Congress generally.

EXPLAINING ANALYTICAL METHODS

CBO plans to publish reports providing general information to help Members of Congress, their staff, and others better understand its work. For example, a report will explain the important issues surrounding CBO's long-term economic and budget forecasts. And CBO will continue to provide technical information about several methods used to analyze the macroeconomic effects of federal policies. That technical information will include

working papers and, in some cases, the computer code used in models.

RELEASING DATA

In 2021 and 2022, CBO will maintain its practice of publishing extensive sets of data to accompany its major recurring reports, including detailed information about 10-year budget projections, historical budget outcomes, 10-year projections for federal trust funds, revenue projections by category, spending projections by budget account, tax parameters, effective marginal tax rates on labor and capital, and 10-year projections of economic variables, including the economy's potential (or sustainable) output.

The agency will also provide details about its baseline projections for the Pell grant program, student loan programs, Medicare, the military retirement program, the pension benefit guarantee program, the Social Security Disability Insurance program, the Social Security Old-Age and Survivors Insurance program, the trust funds for Social Security, child nutrition programs, child support enforcement and collections, foster care and adoption assistance programs, the Supplemental Nutrition Assistance Program, the Supplemental Security Income program, the Temporary Assistance for Needy Families program, the unemployment compensation program, the Department of Agriculture's mandatory farm programs, federal programs that guarantee mortgages, programs funded by the Highway Trust Fund, benefits for veterans and military personnel stemming from the Post-9/11 GI Bill, and veterans' disability compensation and pension programs.

Other data will provide details about long-term budget projections, projections underlying Social Security estimates, more than a thousand expired or expiring authorizations of appropriations, and dozens of federal credit programs. When CBO analyzes the President's budget request, it will post a set of files providing estimates of the budgetary effects of specific proposals. Throughout 2021 and 2022, the agency will post the data from various reports' charts and tables.

ANALYZING THE ACCURACY OF CBO'S ESTIMATES

In 2021 and 2022, CBO will continue to release reports analyzing the accuracy of its past projections of outlays, revenues, deficits, and debt. CBO will also reexamine the accuracy of its previous cost estimates in certain cases when the actual outcome of legislation can be

determined; in other cases, the agency will explore whether new information sheds light on the original estimates. CBO will release a report on the accuracy of its economic forecasts. And the agency will compare its projections of federal subsidies for health insurance with actual amounts.

COMPARING CURRENT ESTIMATES WITH PREVIOUS ONES

In several of its recurring publications—reports about the budget and economic outlook, federal subsidies for health insurance, and the long-term budget outlook—CBO will continue to explain the differences between the current year's projections and those produced in the previous year. In its cost estimates, CBO will continue to identify related legislative provisions for which it has provided estimates in the recent past and explain the extent to which the provisions and estimates at hand are similar or different.

COMPARING CBO'S ESTIMATES WITH THOSE OF OTHER ORGANIZATIONS

CBO will compare its budget projections with the Administration's and its economic projections with those of private forecasters and other government agencies when possible. And in various reports, the agency will include comparisons of its estimates with estimates made by other organizations. In addition, when time does not allow for publication but interest is high, analysts will discuss such comparisons with Congressional staff.

ESTIMATING THE EFFECTS OF POLICY ALTERNATIVES

In 2021 and 2022, CBO will release new interactive products to help users understand the effects of potential changes to federal policies. Reports will also illustrate the potential effects of various policy proposals.

CHARACTERIZING UNCERTAINTY SURROUNDING ESTIMATES

CBO will update an interactive workbook showing its estimates of how changes in economic conditions affect the federal budget. The agency's reports about the 10-year outlook for the budget and the economy, the long-term outlook for the budget, and federal subsidies for health insurance will contain substantial discussions of the uncertainty surrounding CBO's projections. In addition, in any cost estimates in which uncertainty is significant, CBO will include a discussion of the topic.

CREATING DATA VISUALIZATIONS

In 2021 and 2022, CBO will provide information about its budget and economic projections in slide decks and create infographics about actual outlays and revenues. And the agency will look for opportunities to include graphics to enhance the explanations in some cost estimates.

CONDUCTING OUTREACH

CBO will continue to communicate every day with Congressional staff and others outside the agency to explain its findings and methods, respond to questions, and obtain feedback. The agency's Director will meet regularly with Members of Congress to do the same. After each set of baseline projections is published, CBO's staff will meet with Congressional staff to discuss the projections and answer questions.

CBO will obtain input from its Panel of Economic Advisers, its Panel of Health Advisers, and other experts. Many reports will benefit from written comments by outside experts on preliminary versions. For some recurring reports produced on compressed timetables, such as the one about CBO's long-term budget projections, the agency will solicit comments on previous publications and selected technical issues to incorporate improvements in future editions.

CBO's staff will give presentations on Capitol Hill—some in collaboration with the Congressional Research Service—on CBO's budget and economic projections and on other topics. Those presentations will allow CBO to explain its work and answer questions. The agency will also give presentations about its findings and about work in progress in a variety of venues to offer explanations and gather feedback. In addition, CBO will use blog posts to summarize and highlight various issues.

Improving Internal Operations

In addition to focusing directly on serving the Congress, CBO devotes resources to developing employees' skills and providing technological infrastructure to help them be as productive as possible.

DEVELOPING EMPLOYEES' SKILLS

CBO plans to keep focusing on staff development in 2021 and 2022. Because CBO has increased hiring during the past two years, the agency has more new employees than usual, making staff development especially important.

CBO will continue to enhance the knowledge and skills of its staff by funding participation in conferences of researchers, practitioners, and government employees on various economic and policy topics, as well as training in analytic tools and various skills. CBO will also continue to provide courses on writing, effective presentation skills, and graphics to make its work as useful as possible. To remain fiscally prudent, CBO continues to develop employees' skills by means of internal resources and those of sister agencies when it can. The remote work environment made staff development more difficult for much of 2020, so some training has been delayed or will require additional effort or funding so that it can be redesigned.

As it did last year, CBO requests a modest appropriation of no-year funds to facilitate analysts' participation in annual leading academic conferences that occur early in the fiscal year, including conferences focused on tax policy, health care policy, and economics. In addition to offering analysts professional development, such conferences are where CBO does much of its recruiting for economists. In the past, the agency has encountered difficulty in registering staff members for those conferences and arranging for travel because registration begins during the previous fiscal year. The requested appropriation would make planning for the conferences more efficient and in some cases would allow CBO to obtain discounts.

MAINTAINING AND IMPROVING TECHNOLOGICAL INFRASTRUCTURE

CBO continually works to maintain and improve its technological infrastructure. In 2021 and 2022, the agency plans to:

- Update and transform desktop computers and file storage to increase capabilities, enhance ease of use, and improve disaster recovery;
- Improve its ability to assess, detect, and recover from internal and external cyber threats by upgrading, replacing, and adding certain software and systems and by testing the systems' capabilities to withstand attacks via the network or malicious email;
- Continue to improve computing capabilities for many staff by shifting their workstations into cloud-based systems;
- Enhance users' ability to conduct remote teleconferences;

- Increase the number of network connections and the diversity of vendors to ensure that those connections remain resilient and available, now that working from home has become common;
- Invest more in cloud computing technologies and reduce on-premise operations; and
- Implement enhanced security systems so that employees can access certain Microsoft 365 tools remotely.

CBO's Work in 2020

Facing extraordinary economic conditions, unprecedented legislation, and an unfamiliar work environment, CBO continued to analyze economic and budgetary developments for the Congress efficiently in 2020. Not only did CBO develop baseline budget and economic projections; it also provided more frequent updates of those projections than usual so that it could give the Congress timely information. After publishing baseline projections in January and in March, CBO released updated economic projections in April that included the severe consequences of the pandemic. Those projections also included preliminary estimates of the near-term budget outlook, an outlook greatly affected by the economic downturn and the significant pandemic-related legislation that the Congress passed in the spring. Then CBO updated its economic projections in May. Finally, in the summer, the agency published a full set of budget and economic projections, keeping to its regular schedule.

In addition to the extraordinary effort that CBO's staff expended on pandemic-related matters, the agency also conducted its usual work with little interruption. With the budget and economic projections used as benchmarks in most of its analyses, CBO provided formal cost estimates and mandate statements; fulfilled requests for technical assistance; produced scorekeeping reports and estimates for appropriation bills; and published analytic reports, working papers, and other documents. In providing all of that information, CBO aimed to be as timely and transparent as possible.

Formal Cost Estimates and Mandate Statements

CBO completed 546 formal cost estimates in 2020. They generally included explanations of their components and of the estimating methods used. Most also included mandate statements, which assess whether legislation contains intergovernmental or private-sector mandates as

defined in the Unfunded Mandates Reform Act and, if so, assess the magnitude of the mandates' effects on the private sector and on state, local, and tribal governments.

Technical Assistance

CBO provides assistance to Congressional committees related to legislation at various stages of the legislative process. To the extent practicable, CBO also provides information to Members' offices. The most common request is for a preliminary estimate of the effects of a bill or a tentative proposal on mandatory spending, but CBO's assistance may also involve answering general questions about the budget or responding to questions about previously published cost estimates. CBO fulfilled several thousand requests for such assistance in 2020. Such information was generally provided to committees or the leadership of the House or Senate for legislative proposals that they had designated as priorities. CBO provides similar information when amendments to bills are being considered.

Scorekeeping Estimates

In 2020, CBO provided about 100 scorekeeping reports and cost estimates, including reports with account-level detail for individual appropriation bills at all stages of the legislative process, summary tables showing the status of discretionary appropriations (by appropriations subcommittee), and running totals of the budgetary effects of enacted legislation on a year-to-date basis. The number of scorekeeping reports and estimates required for an appropriation cycle can vary depending on its duration and complexity; in recent years, that number has ranged from about 100 to 150.

Reports, Working Papers, and Testimony About the Budget and Economy

CBO provides reports, analyses, and other information to policymakers throughout the legislative process. In 2020, the agency described its baseline projections in a major report about the budget and economic outlook. CBO also provided a comprehensive analysis of the long-term outlook for the federal budget—that is, the outlook over the next 30 years. In addition, CBO produced a report outlining 83 options to reduce the deficit over the 2021–2030 period. Besides those major reports, the agency produced many other analyses of budget and economic issues. All told, the agency produced 78 such publications; they are arrayed by category below.

PROJECTIONS AND BUDGET ISSUES IN MAJOR RECURRING REPORTS

Options for Reducing the Deficit: 2021 to 2030 (December)

The 2020 Long-Term Budget Outlook (September)

An Update to the Budget Outlook: 2020 to 2030 (September)

An Update to the Economic Outlook: 2020 to 2030 (July)

An Analysis of the President's 2021 Budget (March)

Baseline Budget Projections as of March 6, 2020 (March)

The Budget and Economic Outlook: 2020 to 2030 (January)

BUDGET ISSUES

Monthly Budget Review (12 issues)

Answers to Questions for the Record Following a Hearing Conducted by the Senate Committee on the Budget on CBO's Budget Projections (December)

Federal Net Interest Costs: A Primer (December)

The Accuracy of CBO's Budget Projections for Fiscal Year 2020 (December)

Estimating the Cost of One-Sided Bets: How CBO Analyzes the Effects of Spending Triggers (October)

Testimony: The 2020 Long-Term Budget Outlook (Testimony before the Subcommittee on Fiscal Responsibility and Economic Growth, Senate Finance Committee) (October)

Testimony: The 2020 Long-Term Budget Outlook (Testimony before the Senate Budget Committee) (September)

The Outlook for Major Federal Trust Funds: 2020 to 2030 (September)

The Statutory Pay-As-You-Go Act and the Role of the Congress (August)

Sequestration Update Report: August 2020 (August)

The Budgetary Effects of Laws Enacted in Response to the 2020 Coronavirus Pandemic, March and April 2020 (June)

Report on the Troubled Asset Relief Program—March 2020 (March)

Federal Debt: A Primer (March)

Answers to Questions for the Record Following a Hearing Conducted by the House Committee on the Budget on The Budget and Economic Outlook: 2020 to 2030 (February)

CBO's Cost Estimates Explained (February)

Legislation Enacted in the First Session of the 116th Congress That Affects Mandatory Spending or Revenues (February)

How Changes in Economic Conditions Might Affect the Federal Budget: 2020 to 2030 (February)

Automatic Stabilizers in the Federal Budget: 2020 to 2030 (February)

Expired and Expiring Authorizations of Appropriations: Fiscal Year 2020 (February)

Testimony: The Budget and Economic Outlook: 2020 to 2030 (Testimony before the House Budget Committee) (January)

A Simplified Model of How Macroeconomic Changes Affect the Federal Budget (January)

Final Sequestration Report for Fiscal Year 2020 (January)

EDUCATION

The Volume and Repayment of Federal Student Loans: 1995 to 2017 (November)

Income-Driven Repayment Plans for Student Loans (April)

Income-Driven Repayment Plans for Student Loans: Budgetary Costs and Policy Options (February)

EMPLOYMENT AND LABOR MARKETS

Federal Policies in Response to Declining Entrepreneurship (December)

The Employment of Foreign-Born People (June)

ENERGY AND NATURAL RESOURCES*CBO's Oil Price Forecasting Record* (May)*Enhancing the Security of the North American Electric Grid* (March)**FINANCE***Effects of Recapitalizing Fannie Mae and Freddie Mac Through Administrative Actions* (August)*Estimates of the Cost of Federal Credit Programs in 2021* (April)**HEALTH CARE***How CBO Analyzes the Costs of Proposals for Single-Payer Health Care Systems That Are Based on Medicare's Fee-for-Service Program* (December)*Policies to Achieve Near-Universal Health Insurance Coverage* (October)*Who Went Without Health Insurance in 2019, and Why?* (September)*Federal Subsidies for Health Insurance Coverage for People Under 65: 2020 to 2030* (September)*How CBO Analyzes Approaches to Improve Health Through Disease Prevention* (June)**INFRASTRUCTURE AND TRANSPORTATION***Reauthorizing Federal Highway Programs: Issues and Options* (May)*Public-Private Partnerships for Transportation and Water Infrastructure* (January)**MACROECONOMIC ANALYSIS***The Historical Decline in Real Interest Rates and Its Implications for CBO's Projections* (December)*Key Methods That CBO Used to Estimate the Effects of Pandemic-Related Legislation on Output* (October)*The Effects of Pandemic-Related Legislation on Output* (September)*Labor Market Effects of Tax Changes in Times of High and Low Unemployment* (August)*Interim Economic Projections for 2020 and 2021* (May)**NATIONAL SECURITY***Vietnam Veterans' Income in Retirement* (October)*A Review of CBO's Estimate of Spending From the Department of Defense's Medicare-Eligible Retiree Health Care Fund* (October)*The Cost of the Navy's New Frigate* (October)*Long-Term Implications of the 2021 Future Years Defense Program* (September)*The Potential Costs of Expanding U.S. Strategic Nuclear Forces If the New START Treaty Expires* (August)*Federal Reinsurance for Terrorism Risk and Its Effects on the Budget* (June)*Costs of Creating a Space National Guard* (June)*Options for Fielding Ground-Launched Long-Range Missiles* (February)*The Cost of Replacing the Department of Defense's Current Aviation Fleet* (January)*Approaches to Changing Military Compensation* (January)*The Cost of Replacing Today's Naval Aviation Fleet* (January)**TAXES***An Evaluation of CBO's Past Revenue Projections* (August)*Trends in the Internal Revenue Service's Funding and Enforcement* (July)*How Dependents Affect Federal Income Taxes* (January)**OTHER TOPICS***The Distribution of Household Income, 2017* (October)*CBO's Projection of the Effect of Climate Change on U.S. Economic Output* (September)*The Foreign-Born Population and Its Effects on the U.S. Economy and the Federal Budget—An Overview* (January)

Strengthening Responsiveness

In 2020, CBO continued to provide the Congress with budgetary and economic information in a timely manner to inform the budget and policy process. That information took a number of forms, including cost estimates, technical assistance, and reports.

COST ESTIMATES

Of the 546 formal cost estimates that CBO completed in 2020, 291 applied to bills that were considered on the floor of the Senate or House of Representatives. And of those 291 estimates, about 75 percent were provided by CBO before that consideration on the floor took place. The past year's legislative activity was unusual, with much of the Congress's attention (and CBO's activities) focused on large, cross-cutting bills to respond to the pandemic: the Heroes Act; the Coronavirus Preparedness and Response Supplemental Appropriations Act, 2020; the Families First Coronavirus Response Act; the Coronavirus Aid, Relief, and Economic Security (CARES) Act; and the Paycheck Protection Program and Health Care Enhancement Act.

CBO also reviewed more than 350 bills that were scheduled to be considered on the House's suspension calendar (which is generally used to handle noncontroversial bills that are expected to pass quickly and with little debate). In addition, CBO provided information about the budgetary effect of thousands of amendments to legislation, particularly for appropriation bills, versions of the National Defense Authorization Act, the Moving Forward Act, and the Clean Economy Jobs and Innovation Act.

TECHNICAL ASSISTANCE

In 2020, CBO's analysts spent thousands of hours providing technical assistance to Congressional staff. The most common request was for a preliminary estimate of the direct spending effects of a bill or legislative proposal. The analysts often worked one-on-one with Congressional staff on several versions of a proposal, aiming to provide the Congress with information in a timely manner—generally before a scheduled markup took place. The assistance typically happened through a combination of email, phone calls, face-to-face meetings, and virtual meetings.

REPORTS

Every year, CBO publishes a series of reports, along with supplemental data, about the agency's baseline

projections. But as this document describes above, the agency published more frequent updates of those projections than usual in 2020, striving to provide the Congress with timely information as it confronted the pandemic and the resulting economic crisis.

Enhancing Transparency

Transparency is an essential part of CBO's long-standing commitment to providing clear, objective, insightful, and timely information to the Congress and the public. In 2020, CBO focused on bolstering transparency about its methods and data in a variety of ways:

- **Testifying and Publishing Answers to Questions.** CBO presented testimony at five Congressional hearings and published 58 answers to subsequent questions from Members of Congress. CBO also responded to occasional requests from Members for public answers to various other questions.
- **Explaining Its Analytical Methods.** CBO published various reports explaining its analyses and made some supporting documents and computer code available. For instance, CBO published a presentation on its modeling of how businesses provide health insurance and a report that detailed how the agency modeled the effects of pandemic-related legislation on output. In addition, most cost estimates included explanations of how they were developed.
- **Releasing Data.** Comprehensive sets of data files of CBO's projections were published with *The Budget and Economic Outlook: 2020 to 2030, An Analysis of the President's 2021 Budget*, and *The 2020 Long-Term Budget Outlook*. Most reports were accompanied by files providing the data underlying the charts. And some reports, such as one on the distribution of household income, included files of supplemental data.
- **Analyzing the Accuracy of Its Estimates.** CBO publishes a report each year that assesses the quality of its baseline budget projections for the previous fiscal year and identifies factors that might have led to under- or overestimates. In 2020, CBO also released reports examining its baseline projections of revenues and its cost estimate of spending for new health care benefits for military retirees and comparing both with actual outcomes.
- **Comparing Its Current Estimates With Its Previous Ones.** In several of its recurring publications, CBO explained the differences between projections made

in 2020 and those made in the previous year. In addition, when applicable, cost estimates explained the extent to which they differed from estimates for similar bills earlier in the Congressional session.

- **Comparing Its Estimates With Those of Others.** CBO regularly compared its estimates with the budget projections of the Administration, with the economic projections of private forecasters and other government agencies, and with the policy analyses of various organizations. For instance, CBO presented outside forecasts along with its January 2020 and May 2020 economic projections. When time did not allow for a formal publication, CBO often discussed such comparisons with Congressional staff.
- **Estimating the Effects of Policy Alternatives.** CBO prepared reports to estimate the effects that various assumptions about future policies would have on budgetary outcomes. One of those reports presented 83 budget options that would reduce the deficit from 2021 to 2030.
- **Describing How Much Uncertainty Surrounds Its Estimates.** CBO routinely included a discussion of uncertainty in its cost estimates and in its budget and economic projections. When it was possible, those discussions included information about how much the estimate could vary if key factors differed from CBO's estimates. In reports, the agency also developed likely ranges for some key projections—including projections of federal debt, economic growth, and the effects of pandemic-related legislation on output. In addition, CBO published an interactive workbook to allow users to see how changes in economic conditions might affect the federal budget.
- **Creating Data Visualizations.** To promote understanding of its analyses, CBO published information in alternative formats, such as chart books, slide decks, and infographics. Those publications included a series of four infographics that illustrated spending and revenues in the federal budget in 2019. CBO also published slide decks that presented information drawn from *The Budget and Economic Outlook: 2020 to 2030*. One chart book examined the distribution of household income in 2017; another described the employment and earnings of foreign-born people in the United States.
- **Conducting Outreach.** The most important form of outreach was direct communication between CBO

and the Congress in person, by phone, by video conference, and by email. CBO also solicited input from a range of policy experts through its Panels of Economic and Health Advisers and obtained many external reviews of its work. In addition, CBO's staff made presentations about the agency's processes, work in progress, and recently completed work. And the agency published blog posts highlighting key issues.

Improvements in Internal Operations in 2020

CBO continued to focus on staff development in 2020. To ensure that staff members stayed current on topics that are important to CBO's work for the Congress, the agency hosted presentations by a broad range of outside researchers and other experts, and staff members participated in seminars to share information about their analyses, data, and estimating techniques.

CBO also sustained its emphasis on training—particularly early in the year, before the pandemic limited opportunities for the agency's staff to participate in training. CBO funded participation in conferences of researchers, practitioners, and government employees on various economic and policy topics, as well as training in analytic tools and various skills. It provided ongoing training to analysts about the mechanics of scoring and cost estimating; for example, analysts attended workshops on conducting legal research, best practices for preparing cost estimates, and applying scorekeeping guidelines. CBO also worked with the Office of Congressional Workplace Rights to provide training to all staff about their rights as described in the Congressional Accountability Act Reform Act. And CBO continued to emphasize the need to clearly communicate the results of analyses, providing training on effective presentation skills; however, the remote work environment required courses on writing and data visualization to be redesigned, so they will be offered in 2021 instead. CBO also delayed management training and training in soft skills, though those efforts too have restarted in 2021.

CBO implemented numerous improvements to its IT infrastructure and practices in 2020. Among other advances, the agency:

- Quickly shifted its operations to a remote work environment so that it could continue providing the Congress with analysis, despite the pandemic;

- Moved CBO's most intensive computing operations to the cloud, making them faster;
- Shifted sensitive tax data to a secure cloud-based environment, allowing remote access to those data; and
- Enabled employees to use Microsoft 365 applications with enhanced security.

As it sought offers from contractors, CBO continued to encourage small businesses to participate by including them in its requests for price quotes and in its market research and, before making an award, by having each prospective contractor identify its type of business and its size. As a result of those efforts, CBO awarded 158 contracts and purchase orders to small businesses in fiscal year 2020. Of those contracts and purchase orders, 2 went to a minority-owned business and 42 to women-owned businesses.

The Good Accounting Obligation in Government Act requires agencies' budget requests to report public recommendations made by the Government Accountability Office or by an office of inspector general. There are currently no such recommendations for CBO to report.

Key Staffing Changes in 2020 and Early 2021

CBO has seen three key staffing changes in the past year.

Mark Doms was hired as Chief Economist in April 2020. In that role, he supports senior staff in the Financial Analysis Division; the Health Analysis Division; the Labor, Income Security, and Long-Term Analysis Division; the Macroeconomic Analysis Division; the Microeconomic Studies Division; the National Security Division; and the Tax Analysis Division. He also supports cross-divisional efforts to produce estimates of legislative proposals' economic effects and estimates of the resulting budgetary effects.

Dr. Doms has studied a wide variety of topics throughout his career, including macroeconomics, financial markets, labor, productivity, and economic measurement. He has been a senior fellow at the Center for International Governance Innovation, a senior economist at Nomura Securities, Undersecretary for Economic Affairs at the Department of Commerce, Chief Economist in that department, a senior economist at the Federal Reserve Bank of San Francisco, an economist at the Federal Reserve Board, and an economist at the Census Bureau.

His research has been published in the *Quarterly Journal of Economics*, the *Journal of Political Economy*, and elsewhere.

He received a Ph.D. in economics from the University of Wisconsin–Madison and a B.A. from the University of Maryland, Baltimore County.

Julie Topoleski was promoted to be the Director of the newly formed Labor, Income Security, and Long-Term Analysis Division. In that role, she oversees CBO's analyses of issues and policies related to labor, education, and income security, including student loans, work requirements and work supports, the long-term effects of policies affecting children, the effects of increasing the minimum wage, and the distribution of wealth. She will also oversee CBO's long-term budget projections and the redesign of the model that CBO relies on for those projections and for long-term projections of the Social Security system.

Dr. Topoleski joined CBO in 2003 as an analyst, working on the agency's long-term microsimulation model, CBOLT; playing an integral role in long-run analyses of proposed changes to Social Security and Medicare; and helping write CBO's annual *Long-Term Budget Outlook*. In 2014, she became the chief of the division's Long-Term Analysis Unit, which is responsible for long-term projections of Social Security, Medicare, Medicaid, and the federal budget, as well as for long-term analysis of policy changes in those areas. As unit chief, she directed the annual publication of *The Long-Term Budget Outlook* and managed CBOLT. In 2020, she was promoted to be a Deputy Director of Health, Retirement, and Long-Term Analysis.

She received a Ph.D. in economics from the University of Maryland and a B.A. in economics from Mary Washington College.

Chapin White was hired as a Deputy Director of Health, Retirement, and Long-Term Analysis in February 2020 and has been assigned to the same role in the newly renamed Health Analysis Division. He helps lead the analysis of health policy issues and assists in the oversight of CBO's health insurance simulation model. He served as a health analyst at CBO from 2004 to 2010. Before rejoining CBO, he was a senior policy researcher at the RAND Corporation and a faculty member at the Pardee RAND Graduate School. He also previously worked at the Center for Studying Health System Change. His

areas of expertise include price transparency, health insurance coverage, provider payment policy, surprise billing, and microsimulation modeling.

Dr. White holds a Ph.D. in health policy from Harvard University, a master's degree in public policy from the Harvard Kennedy School, and an A.B. from Harvard College.

Organization Charts

In early 2021, CBO reorganized responsibilities to better align resources around three important policy areas.

CBO has created a new division—the Labor, Income Security, and Long-Term Analysis Division—to combine the resources in two other divisions that focused on labor and related items. Establishing that division will allow the newly renamed Health Analysis Division to focus more keenly on complex issues in health policy and allow the Microeconomic Studies Division to focus more effort on policy issues related to climate change and the environment.

Figures 1 through 10 show CBO's organizational structure and list the names of all of CBO's managers.

Figure 1.

Organization Chart—Entire Agency

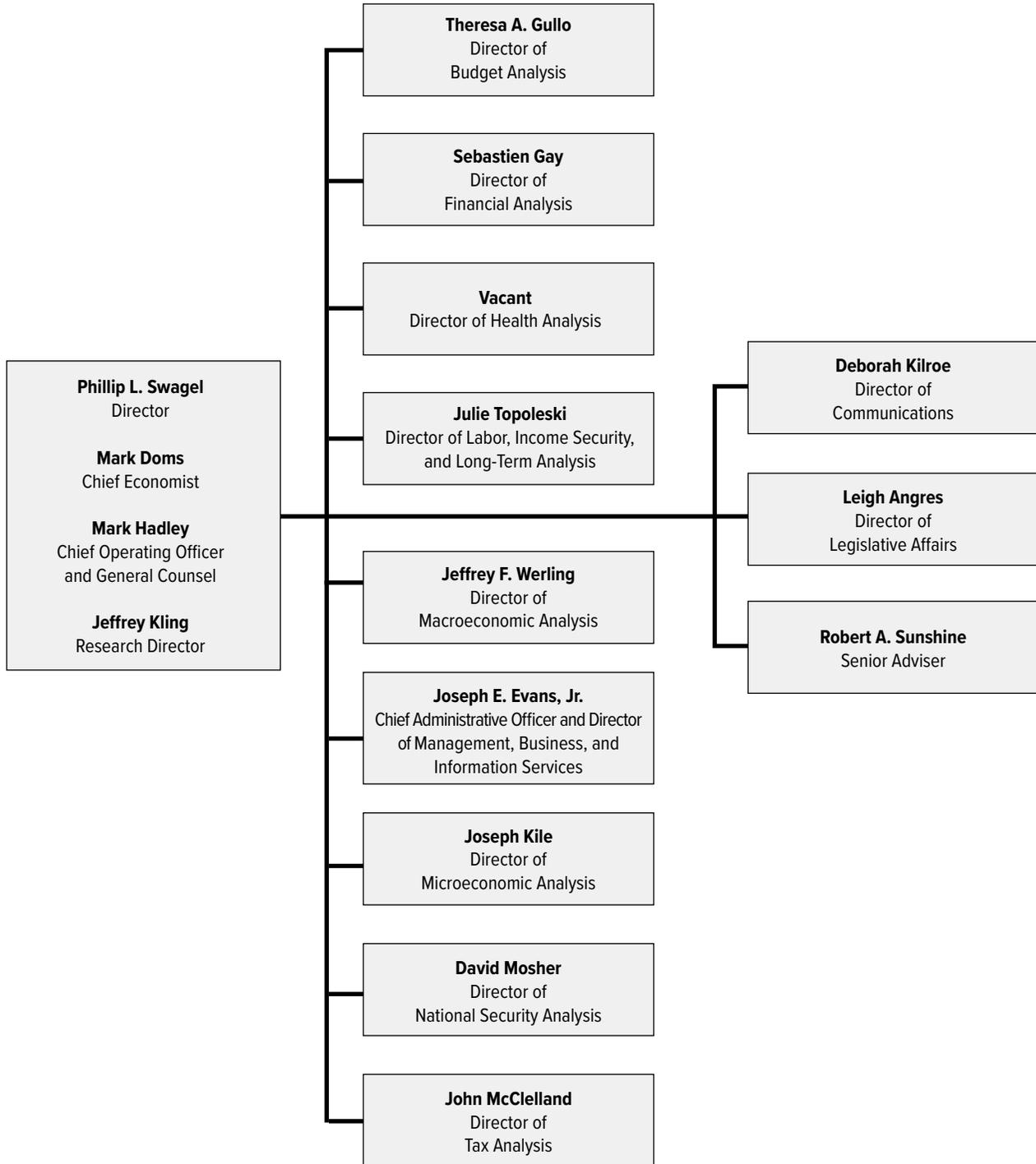


Figure 2.

Organization Chart—Budget Analysis Division

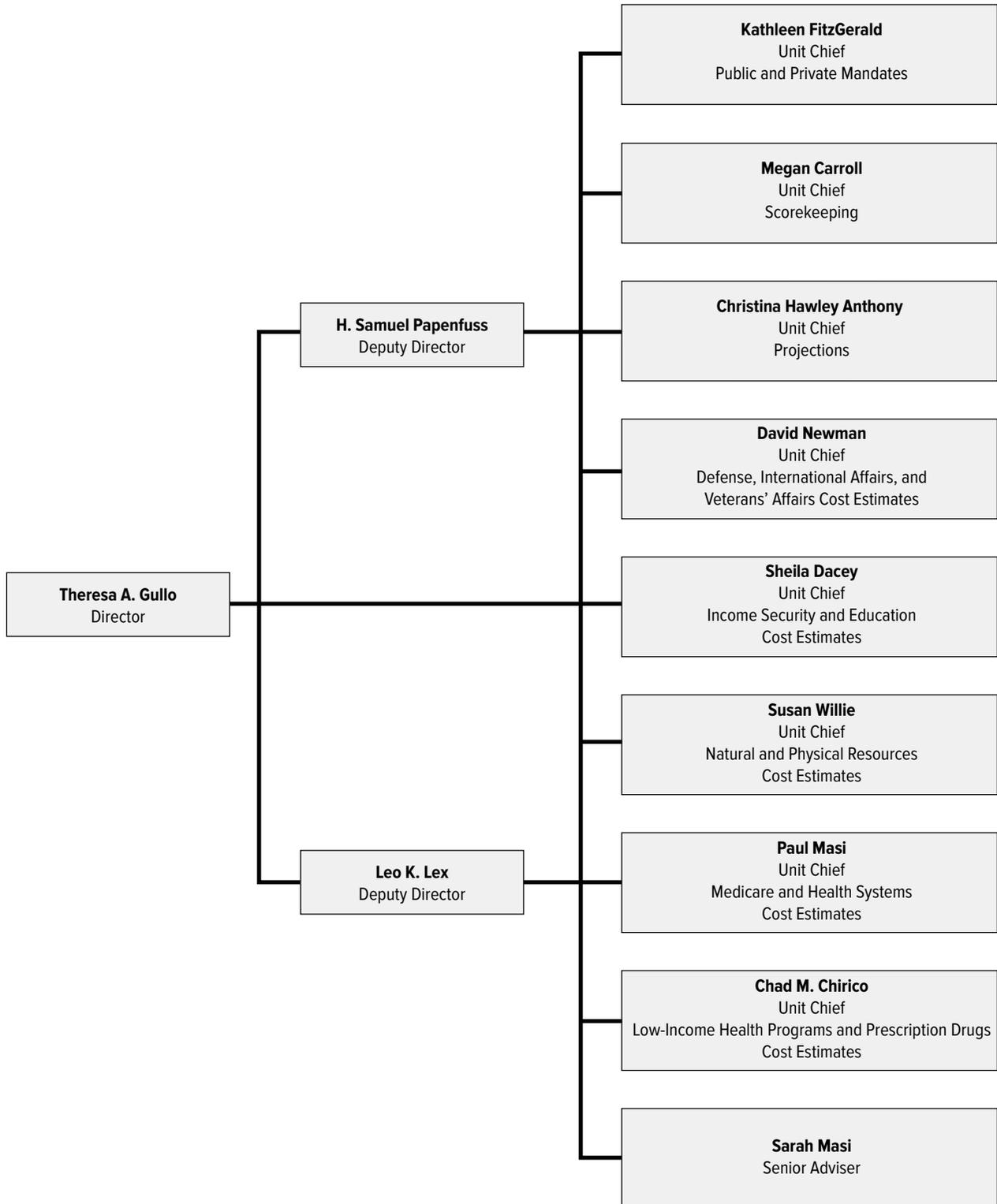


Figure 3.

Organization Chart—Financial Analysis Division

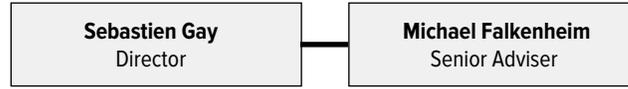


Figure 4.

Organization Chart—Health Analysis Division

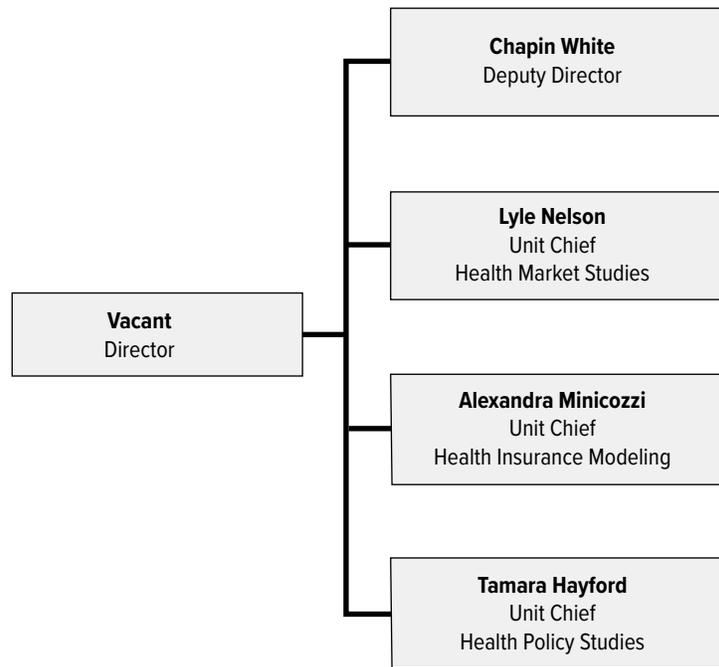


Figure 5.

Organization Chart—Labor, Income Security, and Long-Term Analysis Division

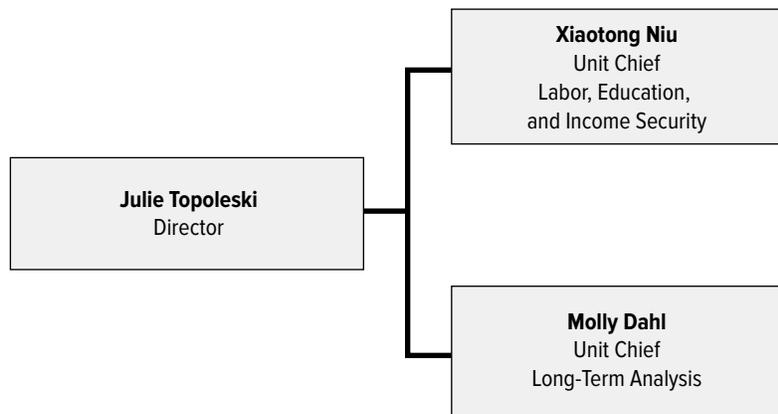


Figure 6.

Organization Chart—Macroeconomic Analysis Division

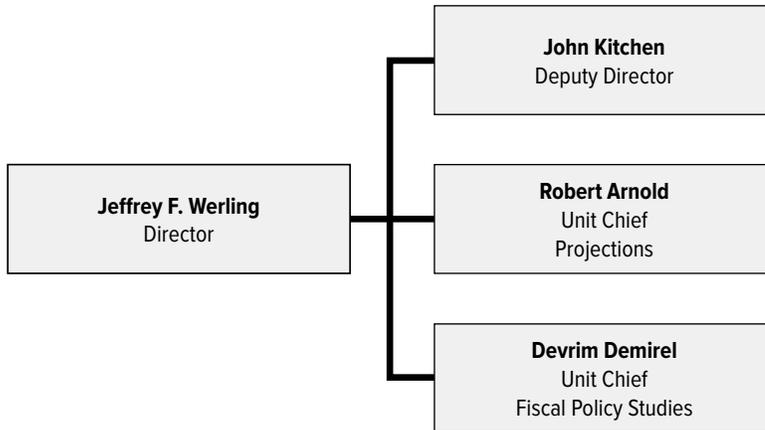


Figure 7.

Organization Chart—Management, Business, and Information Services Division

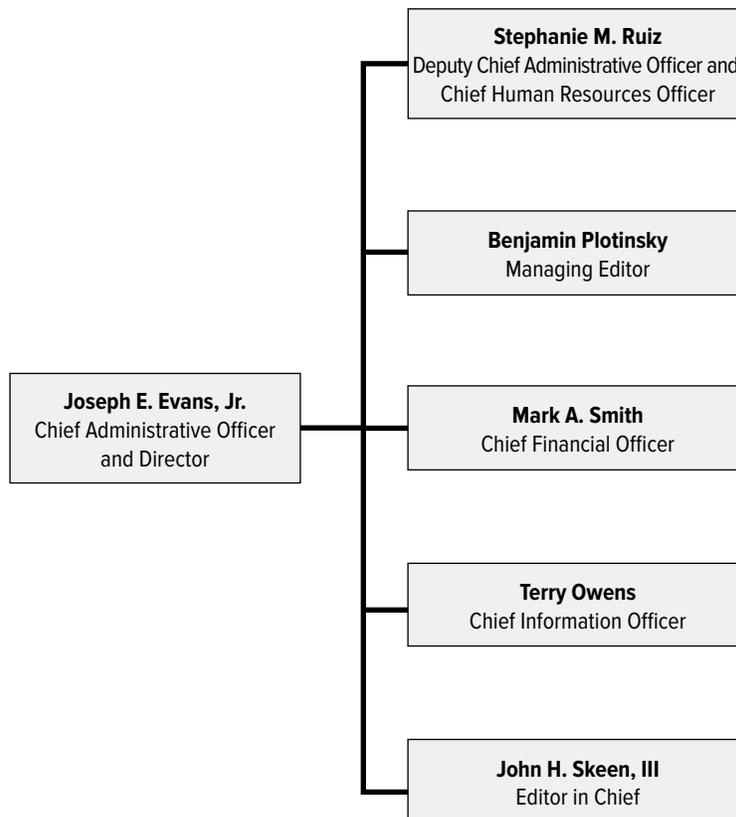


Figure 8.

Organization Chart—Microeconomic Studies Division

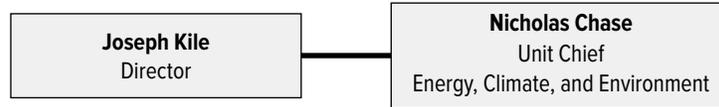


Figure 9.

Organization Chart—National Security Division

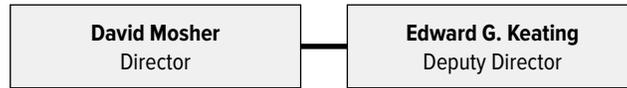
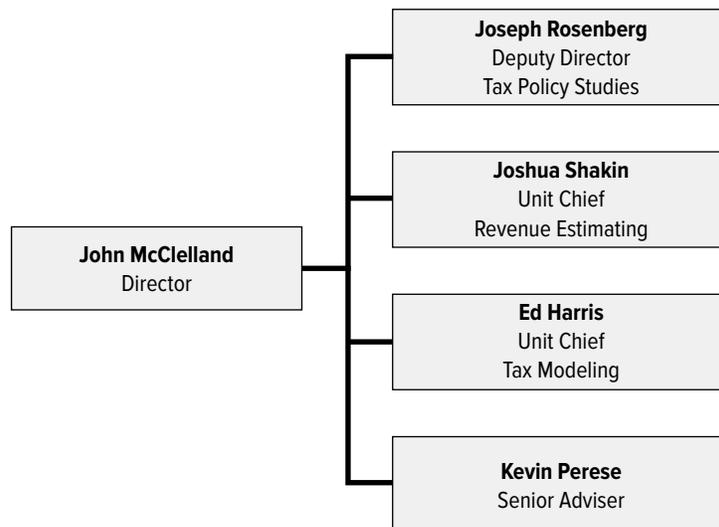


Figure 10.

Organization Chart—Tax Analysis Division



Detailed Tables

Tables 3 through 10 provide a detailed breakdown of CBO's past budgets and requested appropriations for fiscal year 2022.

Table 3.

Summary of Salaries and Expenses Appropriation, by Organizational Unit

Thousands of Dollars

Organizational Unit	FY 2020, Actual		FY 2021, Enacted		FY 2022, Requested		Change From FY 2021, Enacted, to FY 2022, Requested		
	FTEs ^b	Funding	FTEs	Funding	FTEs	Funding	FTEs	Amount	Percentage
Office of the Director ^a	21	4,161	21	4,405	20	4,229	-1	-176	-4.0
Budget Analysis	86	16,690	89	17,630	89	17,932	0	302	1.7
Financial Analysis	10	1,961	10	1,997	10	2,032	0	35	1.8
Health Analysis	0	0	0	0	30	6,047	30	6,047	n.a.
Health, Retirement, and Long-Term Analysis	33	6,460	35	6,941	0	0	-35	-6,941	-100.0
Labor, Income Security, and Long-Term Analysis	0	0	0	0	19	3,830	19	3,830	n.a.
Macroeconomic Analysis	19	3,784	19	3,789	19	3,852	0	63	1.7
Management, Business, and Information Services	41	12,165	40	12,353	41	13,296	1	943	7.6
Microeconomic Studies	18	3,447	17	3,624	14	3,070	-3	-554	-15.3
National Security	12	2,400	13	2,590	13	2,634	0	44	1.7
Tax Analysis	20	3,863	20	3,963	20	4,031	0	68	1.7
Total	261	54,931	264	57,292	275	60,953	11	3,661	6.4

On January 1, 2021, CBO created the Labor, Income Security, and Long-Term Analysis Division by joining parts of two other divisions. CBO also renamed the Health, Retirement, and Long-Term Analysis Division, calling it the Health Analysis Division.

FTE = full-time-equivalent position; FY = fiscal year; n.a. = not applicable.

a. Includes the Office of Communications and the Office of the General Counsel.

b. Cumulative number of FTEs over the course of the year. These numbers do not add up to the total because of rounding.

Table 4.

Summary of Salaries and Expenses Appropriation, by Object Class

Thousands of Dollars

Object Class	CBO Activities	FY 2020, Actual	FY 2021, Enacted	FY 2022, Requested	Change From FY 2021, Enacted, to FY 2022, Requested	
					Amount	Percentage
11.1	Full-Time Permanent Positions	34,273	34,810	37,324	2,514	7.2
11.3	Other Than Full-Time Permanent	1,316	1,481	1,495	14	0.9
11.5	Other Personnel Compensation (Performance awards)	787	700	750	50	7.1
11.5	Other Personnel Compensation (Overtime)	30	45	30	-15	-33.3
12.1	Personnel Benefits	14,002	15,049	15,584	535	3.6
	Total, Pay	50,408	52,085	55,183	3,098	5.9
21.0	Travel and Transportation of Persons	72	191	192	1	0.5
23.3	Communications, Utilities, and Miscellaneous Charges	436	375	407	32	8.5
24.0	Printing and Reproduction	4	38	38	0	0.0
25.0	Other Services	3,202	3,862	4,301	439	11.4
26.0	Supplies and Materials	380	472	459	-13	-2.8
31.0	Equipment	429	269	373	104	38.7
	Total, Nonpay	4,523	5,207	5,770	563	10.8
	Total	54,931	57,292	60,953	3,661	6.4

FY = fiscal year.

Table 5.

Salaries and Expenses Appropriation: Analysis of Change

	FTEs	Requested Amount (Thousands of dollars)
Funding for FY 2021, Enacted	264	57,292
Mandatory Pay and Related Costs		
Personnel additions (Pay only)	11	1,412
Annualization of prior fiscal year personnel actions (Pay only)		543
FY 2022 performance increases (Pay only)		417
Increase in leave buyout (Pay only)		95
FY 2022 performance award increases (Pay only)		50
FY 2022 across-the-board pay adjustment (Pay only)		37
Increase in other than full-time permanent (Pay only)		23
Decrease in overtime (Pay only)		-15
Personnel additions (Benefits)		424
Other benefit changes (Benefits)		101
Increase in leave buyout (Benefits)		7
Performance awards increase (Benefits)		4
Total, Mandatory Pay and Related Costs	11	3,098
Price-Level Changes		
Price increases		89
Total, Price-Level Changes		89
Program Changes		
Increase in travel		1
Increase in communications		27
Increase in other services		371
Increase in equipment		88
Decrease in supplies and materials		-13
Total, Program Changes		474
Net Increase or Decrease	11	3,661
Funding for FY 2022, Requested	275	60,953

FTE = full-time-equivalent position; FY = fiscal year.

Table 6.

Staffing Summary

Organizational Unit	FY 2020		FY 2021, Enacted (FTEs) ^c	FY 2022, Requested (FTEs) ^c	Change in FTEs From FY 2021, Enacted, to FY 2022, Requested
	Actual Number of Employees ^a	Actual FTEs ^b			
Office of the Director ^d	19	21	21	20	-1
Budget Analysis	89	86	89	89	0
Financial Analysis	9	10	10	10	0
Health Analysis	0	0	0	30	30
Health, Retirement, and Long-Term Analysis	36	33	35	0	-35
Labor, Income Security, and Long-Term Analysis	0	0	0	19	19
Macroeconomic Analysis	19	19	19	19	0
Management, Business, and Information Services	42	41	40	41	1
Microeconomic Studies	18	18	17	14	-3
National Security	13	12	13	13	0
Tax Analysis	20	20	20	20	0
Total	265	261	264	275	11

On January 1, 2021, CBO created the Labor, Income Security, and Long-Term Analysis Division by joining parts of two other divisions. CBO also renamed the Health, Retirement, and Long-Term Analysis Division, calling it the Health Analysis Division.

FTE = full-time-equivalent position; FY = fiscal year.

- a. Number of employees at the end of the year.
- b. Cumulative number of FTEs over the course of the year. These numbers do not add up to the total because of rounding.
- c. Based on the number of employees projected for the end of the previous year, minus projected terminations and plus projected hires for the specified year, and allowing for lag time between terminations and hires.
- d. Includes the Office of Communications and the Office of the General Counsel.



Table 7.

Supplemental Data on Mandatory Pay Increases in CBO's Request

Thousands of Dollars

Category	Amount	Explanation of Calculation
Personnel Additions (Pay only)	1,412	CBO added pay for 11 additional FTEs.
Annualization of Prior Fiscal Year Personnel Actions (Pay only)	543	CBO annualized fiscal year 2021 actions to include promotions and performance-based increases for staff.
FY 2022 Performance Increases (Pay only)	417	CBO uses a performance-based system to reward its employees. Performance-based increases are based on employees' accomplishments in the previous year, as reflected in annual performance reviews. Performance is assessed according to five criteria: quality, timeliness and productivity, initiative, written and oral communication skills, and effectiveness of working relationships. Managers' performance is also assessed according to a sixth criterion, leadership. CBO's Director makes the final decisions on all pay changes. Maintaining the ability to reward performance is essential in view of the competitive job markets for economists, budget analysts, and other professionals.
Increase in Leave Buyout (Pay only)	95	Funding to support an increase in leave buyout costs for departing employees.
Performance Awards Increase (Pay only)	50	Slight increase in performance awards (pay) to support an increase in personnel.
FY 2022 Across-the-Board Pay Adjustment (Pay only)	37	Funding for a projected 2.6 percent across-the-board pay increase in January 2022 for staff whose salary is less than \$100,000 (if such an increase is authorized for executive branch agencies).
Increase in Other Than Full-Time Permanent (Pay only)	23	Funding to support an increase in costs for employees other than full-time permanent employees.
Decrease in Overtime (Pay only)	-15	Slight decrease in overtime pay as a result of an increase in teleworking.
Personnel Additions (Benefits)	424	CBO added benefits for 11 additional FTEs.
Personnel Benefit Changes Under Current Law (Benefits)	101	The estimated cost of the change in benefits associated with the salary increases listed above, plus rising prices for benefits.
Increase in Leave Buyout (Benefits only)	7	Benefits to support an increase in leave buyout costs for departing employees.
Performance Awards Increase (Benefits only)	4	Slight increase in performance awards (benefits) to support an increase in personnel.
Total, Mandatory Pay Increases	3,098	

FTE = full-time-equivalent position; FY = fiscal year.

Table 8.

Supplemental Data on Price-Level Increases in CBO's Request

Thousands of Dollars

Category	Amount	Explanation of Calculation
General Inflationary Increase	89	CBO included an adjustment of 1.7 percent to match its projection of inflation costs for nonpay items.
Total, Price-Level Increase	89	

Table 9.

Salaries and Expenses Obligations: 10-Year Data

Thousands of Dollars, Not Adjusted for Inflation, by Fiscal Year

Object Class	CBO Activities	2013	2014	2015	2016	2017	2018	2019	2020	2021, Enacted	2022, Requested
11.1	Full-Time Permanent Positions	28,687	28,200	28,891	29,368	30,120	30,650	32,342	34,273	34,810	37,324
11.3	Other Than Full-Time Permanent	514	818	877	778	895	909	1,117	1,316	1,481	1,495
11.5	Other Personnel Compensation	6	583	542	567	447	643	688	817	745	780
	Subtotal	29,207	29,601	30,310	30,713	31,462	32,202	34,147	36,406	37,036	39,599
12.1	Personnel Benefits	9,711	9,752	10,433	10,807	11,107	11,245	11,873	14,002	15,049	15,584
13.0	Benefits for Former Personnel	0	0	0	0	6	0	0	0	0	0
21.0	Travel and Transportation of Persons	112	123	185	194	148	175	173	72	191	192
22.0	Transportation of Things										
23.3	Communications, Utilities, and Miscellaneous Charges	157	318	298	186	241	523	366	436	375	407
24.0	Printing and Reproduction	11	29	31	19	19	11	28	4	38	38
25.0	Other Services	1,381	2,445	2,313	2,443	2,185	4,779	3,298	3,202	3,862	4,301
26.0	Supplies and Materials	370	422	407	423	383	433	426	380	472	459
31.0	Equipment	520	2,293	1,699	1,635	919	541	405	429	269	373
	Total, Obligations	41,469	44,983	45,676	46,420	46,470	49,909	50,716	54,931	57,292	60,953
	Full-Time-Equivalent Positions	225	225	233	233	237	237	249	261	264	275

Table 10.

Spending for Advertising Services, Fiscal Year 2020

Dollars

Purpose of Spending	Vendor ^a	Obligations
Recruitment Advertisements for Economists	American Economic Association	3,300
Recruitment Advertisement for Economists	Association of Environmental and Resource Economists	250
Recruitment Advertisement for Economists	National Economic Association	250
Recruitment Advertisement for Economists and Health Analysts	AcademyHealth	598
Recruitment Advertisement for Economists and Health Analysts	Association for Public Policy Analysis and Management	500
Recruitment Advertisements for Editor Position	Association of Media and Publishing	155
Recruitment Advertisement for Editor Position	Authentic Jobs	300
Recruitment Advertisement for Editor Position	GitHub	450
Recruitment Advertisement for Editor Position	Mediabistro	297
Recruitment Advertisement for Editor Position	Society of Scholarly Publishing	249
Recruitment Advertisement for Health Analysts	National Association for Business Economics	494
Recruitment Advertisements for Information Technology Positions	Dice	790
Total		7,633

a. CBO did not collect socioeconomic information about these vendors because the amounts spent were small.



Detailed Object Class Analysis

The details of CBO's requested appropriation for 2022 are explained below.

Basis for CBO's Budget Estimates— Personnel Costs

CBO derived these projections of personnel costs with its internally developed software for tracking current payroll costs and projecting future payroll costs. The projections are based on employee-level payroll data at the object class level. In the past, payroll budget projections derived with that software have proved to be highly accurate.

OBJECT CLASS 11—FULL-TIME AND PART-TIME EMPLOYEES: \$39,598,700

- **\$38,493,700 for Base Pay**—funds an average of 275 FTEs for the fiscal year. That amount constitutes an overall net increase of \$2,432,000 from the amount provided in fiscal year 2021. Of the increase:
 - \$1,412,000 supports an increase of 11 FTEs in 2022. That number of FTEs includes staff members hired partway through 2021.
 - \$543,000 is for prior-year personnel actions (performance-based increases and promotions).
 - \$417,000 is for performance-based pay increases in 2022. CBO uses a performance-based system to reward its employees. Performance-based increases are based on employees' accomplishments in the previous year, as reflected in annual performance reviews. Employees' performance is assessed according to five criteria: quality of work, timeliness and productivity, initiative, written and oral communication skills, and effectiveness of working relationships. Managers' performance is also assessed according to a sixth criterion, leadership. CBO's Director makes the final decisions on all pay changes. Maintaining the ability to reward performance is essential in view of the competitive job markets for economists, budget analysts, and other professionals.
 - \$37,000 is for an across-the-board pay increase (if such an increase is authorized for executive branch agencies for 2022) of 2.6 percent in January 2022 for staff whose salary is less than \$100,000.

- \$23,000 is for performance-based pay increases in 2022 for employees other than full-time permanent employees.
- **\$750,000 for Performance Bonuses for Top Performers**—funds bonuses that enable CBO to control long-term compensation costs while helping the agency retain its outstanding performers in competitive job markets. That amount is an increase of \$50,000 from the amount provided in fiscal year 2021.
- **\$325,000 for Leave Buyout Costs**—funds mandatory leave buyout costs for employees who depart. That amount, which is based on current data and projected departures, is an increase of \$95,300 from the amount provided in fiscal year 2021. If leave buyout costs turned out to be higher than that amount, CBO would delay filling vacated positions to cover the costs.
- **\$30,000 for Overtime Pay**—funds overtime pay for nonexempt employees. That amount is a decrease of \$15,000 from the amount provided in fiscal year 2021. Currently, CBO has 11 employees serving in nonexempt positions. They perform such tasks as preparing and printing products, delivering them to the Congress, and providing technical support. CBO must pay employees in nonexempt positions overtime if they work more than 40 hours per week, which happens in the rare cases when timely support of the Congress would be impaired if the work was not performed.

OBJECT CLASS 12—PERSONNEL BENEFITS: \$15,583,900

- **\$7,926,400 for the Federal Employees Retirement System (FERS) and Civil Service Retirement System (CSRS)**—funds mandatory retirement benefits in FERS and CSRS. That amount, which constitutes a decrease of \$210,400 from the amount provided in fiscal year 2021, is based on several factors: the projected base pay of current employees; anticipated attrition; and current benefit rates (24.3 percent for FERS employees generally, 7.5 percent for CSRS and CSRS Offset employees, and 15.5 percent for employees new to government after December 31, 2012). Benefit rates are the percentage of employees' salaries that CBO is required to pay to the two retirement systems.
- **\$2,460,900 for Health Insurance**—funds mandatory health benefit costs. That amount constitutes an

increase of \$331,300 from the amount provided in fiscal year 2021. The increase results from increases in premiums for health insurance and in the size of CBO's staff.

- **\$2,221,000 for Social Security Payroll Taxes**—funds mandatory benefit costs for CBO employees subject to the Social Security payroll tax. That amount, which constitutes an increase of \$236,900 from the amount provided in fiscal year 2021, is projected on the basis of an estimated maximum taxable amount of \$148,100 for each employee, along with a reduction for anticipated attrition.
- **\$1,445,700 for FERS Thrift Savings Plan (TSP) Government Matching Contributions**—funds mandatory government matching contributions. That amount, which constitutes an increase of \$109,500 from the amount provided in fiscal year 2021, is projected on the basis of matching benefits for current employees, their current annualized salary, and a reduction for anticipated attrition. The historical matching benefit for CBO has been roughly 3.8 percent of base pay.
- **\$575,100 for Medicare Payroll Taxes**—funds mandatory benefit costs for CBO employees. That amount, which constitutes an increase of \$38,500 from the amount provided in fiscal year 2021, equals 1.45 percent of base pay, with a reduction for anticipated attrition.
- **\$379,800 for the FERS TSP Government Basic Contribution**—funds the mandatory FERS TSP matching benefit of 1 percent. That amount, which constitutes an increase of \$24,700 from the amount provided in fiscal year 2021, is projected on the basis of the benefits paid to current employees, their current annualized salary, and a reduction for anticipated attrition.
- **\$250,000 for the Transit Benefit Program**—funds mandatory employee benefits that are associated with CBO's Transit Benefit Program. The same amount was provided in fiscal year 2021.
- **\$150,000 for Recruitment Bonuses**—funds a valuable recruiting tool for the agency. The same amount was provided in fiscal year 2021.
- **\$100,000 for Death Benefits**—funds death benefits. The same amount was provided in fiscal year 2021.

- **\$52,100 for Life Insurance**—funds mandatory life insurance benefits for employees. That amount, which constitutes an increase of \$2,800 from the amount provided in fiscal year 2021, is projected on the basis of historical data and equals roughly 0.14 percent of base pay.
- **\$18,000 for the Student Loan Repayment Program**—funds a valuable recruiting tool for the agency. The same amount was provided in fiscal year 2021.
- **\$3,200 for Workers' Compensation**—funds mandatory payments of workers' compensation claims. That amount is an increase of \$2,000 from the amount provided in fiscal year 2021.
- **\$1,700 for the Federal Flexible Spending Account Program (FSAFEDS)**—funds mandatory costs for FSAFEDS. That amount, which is the same as the amount provided in fiscal year 2021, is projected on the basis of employees' historical use of the program.

Basis for CBO's Budget Estimates— Nonpersonnel Costs

CBO projected nonpersonnel costs on the basis of its past experience and plans for the upcoming year.

OBJECT CLASS 21—TRAVEL: \$192,000

- **\$192,000 for Travel**—funds travel for the outside experts who participate in two meetings of the agency's Panel of Economic Advisers and one meeting of the agency's Panel of Health Advisers to support the development and review of the agency's analyses; funds employees' attendance at the annual Allied Social Science Association conference, which is an important venue for recruiting; and funds travel for employees to attend various conferences and training courses, including management and leadership training. The amount is based on anticipated requirements and is an increase of \$1,300 from the amount provided in fiscal year 2021.

OBJECT CLASS 23.3—COMMUNICATIONS, UTILITIES, AND MISCELLANEOUS: \$407,200

- **\$402,600 for Telecommunications and Telephone Services**—funds local and long distance telephone services, smartphone service for some CBO personnel, and secure telecommunication links to support Internet and intranet services. Those links and services between the agency's offices at the Ford House Office Building and its secondary data center

enable CBO's IT staff to conduct daily administrative tasks and to replicate data and systems at both locations daily so that if a disaster occurred at the Ford Building, the agency could keep operating at the other location. The amount is an increase of \$32,300 from the amount provided in fiscal year 2021.

- **\$4,600 for Mail Service**—funds postage, couriers, and mail services. The amount is based on anticipated requirements and is the same as the amount provided in fiscal year 2021.

OBJECT CLASS 24—PRINTING AND REPRODUCTION: \$38,300

- **\$38,300 for Publications**—funds the printing of publications through the Government Publishing Office, as well as other miscellaneous printing requirements involving CBO's products for the Congress. The amount is based on anticipated requirements and is the same as the amount provided in fiscal year 2021.

OBJECT CLASS 25—OTHER SERVICES: \$4,300,400

- **\$2,229,800 for IT Commercial Data and Time Sharing**—funds purchases of data about health care, domestic and international banking and financial markets, and other topics in support of the agency's analyses, as well as software and cloud services for additional capabilities and disaster recovery. The amount is based on anticipated requirements and is an increase of \$474,300 from the amount provided in fiscal year 2021.
- **\$590,600 for Equipment Maintenance and Repair**—funds a broad array of IT items needed for operations. Whenever possible, CBO takes a cost-effective approach to maintenance and repair by negotiating agreements to cover one or more years instead of paying for service and support as it becomes necessary. In addition, CBO has begun leasing copiers and printers to reduce costs. The amount is a decrease of \$38,300 from the amount provided in fiscal year 2021.
- **\$394,400 for Expert Consultants**—funds access to outside experts, particularly in health care and finance, to assist in the preparation of cost estimates and analyses; to perform outside reviews of drafts of analyses; and to provide legal support for human resources and litigation actions regarding former and current employees. The amount is based on anticipated

requirements and is an increase of \$87,900 from the amount provided in fiscal year 2021.

- **\$293,300 for IT System Development and Support**—funds major software installations, upgrades, and support. The amount is based on anticipated requirements and is an increase of \$10,600 from the amount provided in fiscal year 2021.
- **\$235,700 for Training**—funds CBO analysts' participation in conferences; technical training in data analysis (including in statistical analysis software), economic modeling, business and report writing, and IT systems and software; and management training for managers. To constrain expenses in this area, CBO conducts internal training and takes advantage of training provided by sister agencies to the extent possible. The amount is based on anticipated requirements and is an increase of \$150 from the amount provided in fiscal year 2021.
- **\$144,300 for the Financial Management System (Momentum)**—funds annual costs of CBO's maintenance support for Momentum. The amount is based on anticipated requirements and is the same as the amount provided in fiscal year 2021.
- **\$133,900 for Financial Management Support**—funds an interagency agreement with the Library of Congress as well as CBO's annual independent financial audit. The amount is based on anticipated requirements and is an increase of \$2,300 from the amount provided in fiscal year 2021.
- **\$117,500 for Miscellaneous Temporary Support**—funds ad hoc IT, clerical, and miscellaneous support, as well as other services, throughout the agency during peak workload periods. The amount is a decrease of \$140,100 from the amount provided in fiscal year 2021.
- **\$77,000 for Editing and Publications Contractor Support**—principally funds services by contractors to help produce CBO's publications. The contractors are used to augment the agency's editing capacity, particularly during peak workload periods. The amount is based on anticipated requirements and is an increase of \$33,000 from the amount provided in fiscal year 2021.
- **\$40,000 for Payroll Processing Support**—funds comprehensive payroll (and related benefits) processing for CBO by the National Finance Center. That agency provides human resources and payroll

services to more than 140 government agencies (including all agencies in the legislative branch), offering more efficient and cost-effective services than those agencies would otherwise be able to obtain. The amount is based on anticipated requirements and is an increase of \$3,500 from the amount provided in fiscal year 2021.

- **\$37,900 for Human Resources Contract Support**—funds a variety of costs related to CBO's personnel, including those for posting jobs to the USAJobs website, advertising open positions, and retaining personnel records, as well as minor costs associated with employment services, such as retirement counseling. The amount is an increase of \$4,500 from the amount provided in fiscal year 2021.
- **\$6,000 for Official Representation**—funds events such as meetings of the Panel of Economic Advisers, meetings of the Panel of Health Advisers, meetings of other outside analysts, and minority recruitment events. The amount is based on anticipated requirements and is the same as the amount provided in fiscal year 2021.

OBJECT CLASS 26.0—SUPPLIES AND MATERIALS: \$459,100

- **\$358,500 for Library Subscriptions**—funds library (primarily online) subscriptions to a variety of publications and services, including *Congressional Quarterly*, *National Journal*, Lexis-Nexis, EconLit, the Bureau of National Affairs, EBSCO, PROQUEST, the Social Science Research Network, Science Direct, JSTOR, the *Wall Street Journal*, Inside Washington Publishers, and Energy and Environment. The amount is based on anticipated requirements and is a decrease of \$4,800 from the amount provided in fiscal year 2021.

- **\$100,600 for Office Supplies**—funds expenses for office supplies, reasonable accommodations for employees' requirements under the Americans With Disabilities Act, paper, envelopes, emergency response kits required for evacuation drills, award supplies, and other items. The amount is a decrease of \$8,000 from the amount provided in fiscal year 2021.

OBJECT CLASS 31.0—EQUIPMENT: \$373,000

- **\$156,000 for Hardware**—funds the purchase and replacement of CBO's laptops and desktops during their life cycle. The amount is based on anticipated requirements and is an increase of \$141,000 from the amount provided in fiscal year 2021.
- **\$102,500 for Office Furniture**—funds office furniture for new personnel and the replacement of worn-out furniture. The amount is based on anticipated requirements and is an increase of \$16,900 from the amount provided in fiscal year 2021.
- **\$90,000 for Office Equipment**—funds the modernization of conference rooms' audiovisual systems to better support telework. The amount is based on anticipated requirements and is an increase of \$90,000 from the amount provided in fiscal year 2021.
- **\$22,000 for Software**—funds various software requirements. The amount is a decrease of \$144,000 from the amount provided in fiscal year 2021.
- **\$2,500 for Books**—funds the purchase of books used by CBO's staff to meet analytical requirements. The amount is based on anticipated requirements and is the same as the amount provided in fiscal year 2021.