

ANALYTICAL PERSPECTIVES

BUDGET OF THE
U.S. GOVERNMENT

FISCAL YEAR 2023

OFFICE OF MANAGEMENT AND BUDGET



THE WHITE HOUSE
WASHINGTON

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THE BUDGET DOCUMENTS

Budget of the United States Government, Fiscal Year 2023 contains the Budget Message of the President, information on the President's priorities, and summary tables.

Analytical Perspectives, Budget of the United States Government, Fiscal Year 2023 contains analyses that are designed to highlight specified subject areas or provide other significant presentations of budget data that place the budget in perspective. This volume includes economic and accounting analyses, information on Federal receipts and collections, analyses of Federal spending, information on Federal borrowing and debt, baseline or current services estimates, and other technical presentations.

Supplemental tables and other materials that are part of the *Analytical Perspectives* volume are available at <https://whitehouse.gov/omb/analytical-perspectives/>.

Appendix, Budget of the United States Government, Fiscal Year 2023 contains detailed information on the various appropriations and funds that constitute the budget and is designed primarily for the use of the Appropriations Committees. The *Appendix* contains more detailed financial information on individual programs and appropriation accounts than any of the other budget documents. It

includes for each agency: the proposed text of appropriations language; budget schedules for each account; legislative proposals; narrative explanations of each budget account; and proposed general provisions applicable to the appropriations of entire agencies or group of agencies. Information is also provided on certain activities whose transactions are not part of the budget totals.

BUDGET INFORMATION AVAILABLE ONLINE

The President's Budget and supporting materials are available online at <https://whitehouse.gov/omb/budget/>. This link includes electronic versions of all the budget volumes, supplemental materials that are part of the *Analytical Perspectives* volume, spreadsheets of many of the budget tables, and a public use budget database. This link also includes *Historical Tables* that provide data on budget receipts, outlays, surpluses or deficits, Federal debt, and Federal employment over an extended time period, generally from 1940 or earlier to 2027. Also available are links to documents and materials from budgets of prior years.

For more information on access to electronic versions of the budget documents, call (202) 512-1530 in the D.C. area or toll-free (888) 293-6498. To purchase the printed documents call (202) 512-1800.

GENERAL NOTES

1. All years referenced for budget data are fiscal years unless otherwise noted. All years referenced for economic data are calendar years unless otherwise noted.
2. At the time the Budget was prepared, none of the full-year appropriations bills for 2022 have been enacted, therefore, the programs and activities normally provided for in the full-year appropriations bills were operating under a continuing resolution (Public Law 117-43, division A, as amended by Public Law 117-70, division A; Public Law 117-86, division A; and Public Law 117-95). References to 2022 spending in the text and tables reflect the levels provided by the continuing resolution and, if applicable, the following Public Laws which provided additional appropriations to certain accounts in 2022—
 - The Disaster Relief Supplemental Appropriations Act, 2022 (Public Law 117-43, division B);
 - The Afghanistan Supplemental Appropriations Act, 2022 (Public Law 117-43, division C);
 - The Infrastructure Investment and Jobs Appropriations Act (Public Law 117-58, division J); and
 - The Additional Afghanistan Supplemental Appropriations Act, 2022 (Public Law 117-70, division B).
3. The estimates in the 2023 Budget do not reflect the effects of the Ukraine Supplemental Appropriations Act, 2022 (included in Public Law 117-103) due to the late date of enactment.
4. Detail in this document may not add to the totals due to rounding.

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TABLE OF CONTENTS

	<i>Page</i>
List of Charts and Tables	v
Introduction	
1. Introduction	15
Economic and Budget Analyses	
2. Economic Assumptions	21
3. Long-Term Budget Outlook	31
4. Federal Borrowing and Debt	39
Management	
5. Delivering a High-Performance Government	59
6. Building and Using Evidence to Improve Government Effectiveness	69
7. Strengthening the Federal Workforce	75
Budget Concepts and Budget Process	
8. Budget Concepts	93
9. Coverage of the Budget	115
10. Budget Process	121
Federal Receipts	
11. Governmental Receipts	135
12. Offsetting Collections and Offsetting Receipts	145
13. Tax Expenditures	153
Special Topics	
14. Aid to State and Local Governments	205
15. Leveraging Federal Statistics to Strengthen Evidence-Based Decision-Making	225
16. Information Technology and Cybersecurity Funding	233
17. Federal Investment	241
18. Research and Development	247
19. Credit and Insurance	255
20. Federal Drug Control Funding	275
21. Federal Budget Exposure to Climate Risk	277

	<i>Page</i>
Technical Budget Analyses	
22. Current Services Estimates	295
23. Trust Funds and Federal Funds	307
24. Comparison of Actual to Estimated Totals.....	323

* Available on the internet at <http://www.whitehouse.gov/omb/analytical-perspectives/>

LIST OF CHARTS AND TABLES

LIST OF CHARTS AND TABLES

LIST OF CHARTS

	<i>Page</i>
2–1. Range of Uncertainty for the Budget Deficit	29
3–1. Comparison of Annual Surplus/Deficit.....	32
3–2. Comparison of Publicly Held Debt	32
3–3. Elderly (Age 65+) Share of the U.S. Population	33
3–4. Climate Risk Alternative	34
3–5. Alternative Health Care Costs.....	35
3–6. Alternative Discretionary Assumptions	35
3–7. Historical Values and Budget Projections for 10-Year Treasury Rates	36
3–8. Historical Values and CBO Projections for 10-Year Treasury Rates	36
5–1. Department of the Treasury FY 2022–2026 Strategic Plan Crosswalk	61
5–2. Conceptual Framework for the Annual Data-driven Review of Strategic Objectives	65
7–1. Potential Retirees to Younger than 30 Employees: Federal Workforce	77
7–2. Potential Retirees to Younger than 30 Employees: Federal IT Workforce Vs. Federal Workforce	78
7–3. Federal vs. Private Pay Differential	80
7–4. Masters degree or Above by Year for Federal and Private Sectors	87
7–5. High School Graduate or Less by Year for Federal and Private Sectors	87
7–6. Average Age by Year for Federal and Private Sectors	88
7–7. Government-Wide On-Board Distribution 10-1-1978.....	88
7–8. Government-Wide On-Board Distribution 9-30-2021.....	89
7–9. The Changing General Schedule Workforce.....	89
8–1. Relationship of Budget Authority to Outlays for 2023	105
10–1. Scoring of \$1,035 million in GSA Construction Projects using the Federal Capital Revolving Fund	129
15–1. The Decentralized Federal Statistical System.....	227
16–1. Trends in Federal IT Spending	234
16–2. FY 2022 Federal Civilian IT Investment Portfolio Summary.....	234
19–1. Face Value of Federal Credit Outstanding	269
21–1. Wildland Fire Suppression Spending by USDA Forest Service and the Department of the Interior, 1994–2020 (2020\$)	287

LIST OF TABLES

	<i>Page</i>
Economic and Budget Analyses	
Economic Assumptions	
2–1. Economic Assumptions	22
2–2. Comparison of Economic Assumptions in the 2022 and 2023 Budgets	23
2–3. Comparison of Economic Assumptions	24
2–4. Sensitivity of the Budget to Economic Assumptions	26
2–5. Forecast Errors, 2002-Present	27
2–6. Differences Between Estimated and Actual Surpluses or Deficits for Five-Year Budget Estimates Since 1985	28
Long-Term Budget Outlook	
3–1. 25-Year Debt Projections Under Alternative Budget Scenarios	33
3–2. Intermediate Actuarial Projections for OASDI and HI, 2021 Trustees’ Reports	37
Federal Borrowing and Debt	
4–1. Trends in Federal Debt Held by the Public and Interest on the Debt Held by the Public	40
4–2. Federal Government Financing and Debt	42
4–3. Debt Held by the Public Net of Financial Assets and Liabilities	47
4–4. Agency Debt	49
4–5. Debt Held by Government Accounts	51
4–6. Federal Funds Financing and Change in Debt Subject to Statutory Limit	54
4–7. Foreign Holdings of Federal Debt	55
Management	
Strengthening the Federal Workforce	
7–1. Hiring Trends Since 2016	77
7–2. Federal Civilian Employment in the Executive Branch	81
7–3. Total Federal Employment	83
7–4. Occupations of Federal and Private Sector Workforces	85
7–5. Personnel Pay And Benefits	86
Budget Concepts and Budget Process	
Budget Concepts	
Budget Calendar	95
8–1. Totals for the Budget and the Federal Government	98
Coverage of the Budget	
9–1. Comparison of Total, On-Budget, and Off-Budget Transactions	116
Budget Process	
10–1. Program Integrity Discretionary Adjustments and Mandatory Savings	122
10–2. Discretionary Pell Funding Needs	127
10–3. Paygo Scoring: Expanding Accrual Accounting for DOD Retiree Healthcare Benefits	131

Federal Receipts

Governmental Receipts

11–1. Receipts by Source—Summary	135
11–2. Effect of Budget Proposals	136
11–3. Receipts by Source	142
11–3. Receipts by Source	143

Offsetting Collections and Offsetting Receipts

12–1. Offsetting Collections and Offsetting Receipts from the Public	146
12–2. Summary of Offsetting Receipts by Type	147
12–3. Gross Outlays, User Charges, Other Offsetting Collections and Offsetting Receipts from the Public, and Net Outlays	147
12–4. User Charge Proposals in the 2023 Budget	152
12–5. Offsetting Receipts by Type	*
12–6. Offsetting Collections and Offsetting Receipts, Detail—FY 2023 Budget	*

Tax Expenditures

13–1. Estimates of Total Income Tax Expenditures for Fiscal Years 2021–2031	156
13–2a. Estimates of Total Corporate Income Tax Expenditures for Fiscal Years 2021–2031	163
13–2b. Estimates of Total Individual Income Tax Expenditures for Fiscal Years 2021–2031	170
13–3. Income Tax Expenditures Ranked by Total	178
13–3. Income Tax Expenditures Ranked by Total Fiscal Year 2022–2031 Projected Revenue Effect	177
13–4. Present Value of Selected Tax Expenditures for Activity in Calendar Year 2021	181

Special Topics

Aid to State and Local Governments

14–1. Trends in Federal Grants to State and Local Governments	206
14–2. Federal Grants to State and Local Governments—Budget Authority and Outlays	212
14–3. Summary of Programs by Agency, Bureau, and Program	*
14–4. Summary of Programs by State	*
14–5.—14–61. 2023 Budget State-by-State Tables	*

Leveraging Federal Statistics to Strengthen Evidence-Based Decision-Making

15–1. 2021–2023 Budget Appropriations for Principal Statistical Agencies	231
--	-----

Information Technology and Cybersecurity Funding

16–1. Estimated FY 2023 Civilian Federal IT Spending and Percentage by Agency	235
16–2. Estimated Civilian Federal Cybersecurity Spending by Agency	237
16–3. NIST Framework Function Civilian CFO Act Agency Funding Totals	239

Federal Investment

17–1. Composition of Federal Investment Outlays	243
17–2. Federal Investment Budget Authority and Outlays: Grant and Direct Federal Programs	244

*Available on the internet at <http://www.whitehouse.gov/omb/analytical-perspectives/>

	<i>Page</i>
Research and Development	
18–1. Federal Research and Development Spending	253
Credit and Insurance	
19–1. Estimated Future Cost of Outstanding Federal Credit Programs	270
19–2. Direct Loan Subsidy Rates, Budget Authority, and Loan Levels, 2021–2023	271
19–3. Loan Guarantee Subsidy Rates, Budget Authority, and Loan Levels, 2021–2023	273
19–4. Summary of Federal Direct Loans and Loan Guarantees	274
19–5. Reestimates of Credit Subsidies on Loans Disbursed Between 1992–2021	*
19–6. Face Value of Government-Sponsored Lending	*
19–7. Lending and Borrowing by Government-Sponsored Enterprises (GSEs)	*
19–8. Direct Loan Transactions of the Federal Government	*
19–9. Guaranteed Loan Transactions of the Federal Government	*
19–10. Change in Programmatic Costs of Troubled Asset Relief Program	*
19–11. Troubled Asset Relief Program Current Value	*
19–12. Troubled Asset Relief Program Effects on the Deficit and Debt	*
19–13. Troubled Asset Relief Program Effects on the Deficit and Debt Calculated on a Cash Basis	*
19–14. Troubled Asset Relief Program Reestimates	*
19–15. Detailed TARP Program Levels and Costs	*
19–16. Comparison of CBO and OMB TARP Costs	*
Federal Drug Control Funding	
20–1. Drug Control Funding FY 2021–FY 2023	275
Federal Budget Exposure to Climate Risk	
21–1. Summary of Quantified Federal Climate Risk Exposure Projected Change in Annual Expenditures of Assessed Programs	278
21–2. Katrisk Gross AAL and Occurrence Exceedance Probabilities Under Baseline and Climate Sensitivity Scenarios, Lower (RCP 4.5) and Higher (RCP 8.5) (2020 USD)	282
Technical Budget Analyses	
Current Services Estimates	
22–1. Category Totals for the Adjusted Baseline	295
22–2. Summary of Economic Assumptions	298
22–3. Baseline Beneficiary Projections for Major Benefit Programs	299
22–4. Impact of Regulations, Expiring Authorizations, and Other Assumptions in the Baseline	*
22–5. Receipts by Source in the Projection of Adjusted Baseline	300
22–6. Effect on Receipts of Changes in the Social Security Taxable Earnings Base	300
22–7. Change in Outlay Estimates by Category in the Adjusted Baseline	301
22–8. Outlays by Function in the Adjusted Baseline	302
22–9. Outlays by Agency in the Adjusted Baseline	303
22–10. Budget Authority by Function in the Adjusted Baseline	304
22–11. Budget Authority by Agency in the Adjusted Baseline	306
22–12. Current Services Budget Authority and Outlays by Function, Category, and Program	*

*Available on the internet at <http://www.whitehouse.gov/omb/analytical-perspectives/>

Trust Funds and Federal Funds	
23-1. Receipts, Outlays, and Surplus or Deficit by Fund Group	309
23-2. Comparison of Total Federal Fund and Trust Fund Receipts to Unified Budget Receipts, Fiscal Year 2021	310
23-3. Income, Outgo, and Balances of Trust Funds Group	311
23-4. Income, Outgo, and Balances of Major Trust Funds	313
23-5. Income, Outgo, and Balances of Selected Special Funds	321
Comparison of Actual to Estimated Totals	
24-1. Comparison of Actual 2021 Receipts with the Initial Current Services Estimates	323
24-2. Comparison of Actual 2021 Outlays with the Initial Current Services Estimates	324
24-3. Comparison of the Actual 2021 Deficit with the Initial Current Services Estimate ...	325
24-4. Comparison of Actual and Estimated Outlays for Mandatory and Related Programs Under Current Law	326
24-5. Reconciliation of Final Amounts for 2021	328
Detailed Functional Tables	
25-1. Budget Authority and Outlays by Function, Category and Program	*
Federal Budget by Agency and Account	
26-1. Federal Budget by Agency and Account	*
Calfed Bay-Delta Federal Budget Crosscut Report	*
Columbia River Basin Federal Budget Crosscut Report	*
Lead Pipe Federal Budget Crosscut Report	*

*Available on the internet at <http://www.whitehouse.gov/omb/analytical-perspectives/>

INTRODUCTION

1. INTRODUCTION

The *Analytical Perspectives* volume presents analyses that highlight specific subject areas or provide other significant data that place the President's 2023 Budget in context and assist the public, policymakers, the media, and researchers in better understanding the Budget. This volume complements the main *Budget* volume, which presents the President's Budget policies and priorities, and the *Budget Appendix* volume, which provides appropriations language, schedules for budget expenditure accounts, and schedules for selected receipt accounts.

Presidential Budgets have included separate analytical presentations of this kind for many years. The 1947 Budget and subsequent budgets included a separate section entitled *Special Analyses and Tables* that covered four, and later more, topics. For the 1952 Budget, the section was expanded to 10 analyses, including many subjects still covered today, such as receipts, investment, credit programs, and aid to State and local governments. With the 1967 Budget this material became a separate volume entitled *Special Analyses*, and included 13 chapters. The material has remained a separate volume since then, with the exception of the Budgets for 1991–1994, when all of the budget material was included in one volume. Beginning with the 1995 Budget, the volume has been named *Analytical Perspectives*. Since the 2022 Budget was released following a presidential transition, OMB published an abbreviated *Analytical Perspectives* volume. The 2023 Budget includes a more comprehensive *Analytical Perspectives* volume.

In addition to the information included in this volume, supplemental tables and other materials that are part of the *Analytical Perspectives* volume are available at <http://www.whitehouse.gov/omb/analytical-perspectives>. Tables included at this link are shown in the List of Tables in the front of this volume with an asterisk instead of a page number.

Overview of the Chapters

Economic and Budget Analyses

Economic Assumptions and Overview. This chapter reviews recent economic developments; presents the Administration's assessment of the economic situation and outlook; compares the economic assumptions on which the 2023 Budget is based with the assumptions for last year's Budget and those of other forecasters; provides sensitivity estimates for the effects on the Budget of changes in specified economic assumptions; and reviews past errors in economic projections.

Long-Term Budget Outlook. This chapter assesses the long-term budget outlook under current policies and under the Budget's proposals. It focuses on 25-year

projections of Federal deficits and debt to illustrate the long-term impact of the Administration's proposed policies. It also discusses the uncertainties of the long-term budget projections and discusses the actuarial status of the Social Security and Medicare programs.

Federal Borrowing and Debt. This chapter analyzes Federal borrowing and debt and explains the budget estimates. It includes sections on special topics such as trends in debt, debt held by the public net of financial assets and liabilities, investment by Government accounts, and the statutory debt limit.

Management

Delivering a High-Performance Government. This chapter describes the Administration's Performance Framework approach to performance management and its application by the Biden-Harris Administration to improve outcomes that make a difference in the lives of the American people. It discusses the Federal Government's use of strategic planning and priority goal-setting to define success, regular data-driven performance reviews to remain on-track, and communicating transparently about results to build trust with the American public.

Building and Using Evidence to Improve Government Effectiveness. This chapter discusses the Administration's commitment to evidence-based policymaking through its efforts to build and promote a culture of evidence and evaluation in the Federal Government, including implementing Title I of the Evidence Act and new initiatives to accelerate progress. It highlights examples of new evidence-building investments at agencies, including evaluation capacity and priority cross-cutting evaluations that span agencies and functions. It also includes examples of programmatic agency investments that are supported by evidence of effectiveness.

Strengthening the Federal Workforce. This chapter presents summary data on Federal employment and compensation, and discusses the approach the Administration is taking with Federal human capital management.

Budget Concepts and Budget Process

Budget Concepts. This chapter includes a basic description of the budget process, concepts, laws, and terminology, and includes a glossary of budget terms.

Coverage of the Budget. This chapter describes activities that are included in budget receipts and outlays (and are therefore classified as "budgetary") as well as those activities that are not included in the Budget (and are therefore classified as "non-budgetary"). The chapter also defines the terms "on-budget" and "off-budget" and includes illustrative examples.

Budget Process. This chapter describes the Administration's approach and proposals related to

budget enforcement, such as sequestration and Pay-As-You-Go procedures, and budget presentation, such as adjustments to the baseline to improve comparisons of the cost of policy. Suggested reforms in budgeting for large Federal capital projects and pandemic preparedness are discussed.

Federal Receipts

Governmental Receipts. This chapter presents information on estimates of governmental receipts, which consist of taxes and other compulsory collections. It includes descriptions of tax-related legislation enacted in the last year and describes proposals affecting receipts in the 2023 Budget.

Offsetting Collections and Offsetting Receipts. This chapter presents information on collections that offset outlays, including collections from transactions with the public and intragovernmental transactions. In addition, this chapter presents information on “user fees,” charges associated with market-oriented activities and regulatory fees. Detailed tables of offsetting receipts and offsetting collections in the Budget are available at the internet address cited above.

Tax Expenditures. This chapter describes and presents estimates of tax expenditures, which are defined as revenue losses from special exemptions, credits, or other preferences in the tax code.

Special Topics

Aid to State and Local Governments. This chapter presents crosscutting information on Federal grants to State and local governments. The chapter also includes a table showing historical grant spending, and a table with budget authority and outlays for grants in the Budget. Tables showing State-by-State spending for major grant programs are available at the internet address cited above.

Leveraging Federal Statistics to Strengthen Evidence-Based Decision-Making. This chapter discusses the vital role of the trusted Federal statistical system in generating data that the public, businesses, and governments need to make informed decisions. The chapter describes how a strong statistical infrastructure and operation as a seamless Federal statistical system will improve its ability to meet growing demands, while addressing new and emerging challenges. The chapter presents examples of innovative developments and applications throughout the Federal statistical community and highlights 2023 Budget proposals for the Government’s principal statistical agencies and units.

Information Technology and Cybersecurity Funding. This chapter addresses Federal information technology (IT) and cybersecurity, highlighting initiatives and proposed funding levels to deliver critical citizen services, keep sensitive data and systems secure, and further the vision of modern Government. The Administration will invest in modern, secure technologies and services to drive enhanced efficiency and effectiveness. This will include undertaking complex Government-wide modernization efforts, driving improved delivery of citizen-facing services, and improving the overall management of the

Federal IT portfolio. The Administration will also continue its efforts to further build the Federal IT workforce and seek to reduce the Federal Government’s cybersecurity risk in order to better serve and protect the American public.

Federal Investment. This chapter discusses federally financed spending that yields long-term benefits. It presents information on annual spending on physical capital, research and development, and education and training.

Research and Development. This chapter presents a crosscutting review of research and development funding in the Budget.

Credit and Insurance. This chapter provides crosscutting analyses of the roles, risks, and performance of Federal credit and insurance programs and Government-sponsored enterprises (GSEs). The chapter covers the major categories of Federal credit (housing, education, small business and farming, energy and infrastructure, and international) and insurance programs (deposit insurance, pension guarantees, disaster insurance, and insurance against terrorism-related risks). Five additional tables address transactions including direct loans, guaranteed loans, and GSEs. These tables are available at the internet address cited above.

Federal Drug Control Funding. This chapter displays enacted and proposed drug control funding for Federal Departments and Agencies.

Federal Budget Exposure to Climate Risk. This chapter discusses the financial risks that the Federal government faces from broad exposure to threats caused by global climate change. It summarizes recent OMB analyses of individual programmatic climate impacts that are informed by distinct climate scenarios, as well as potential impacts on revenues.

Technical Budget Analyses

Current Services Estimates. This chapter discusses the conceptual basis of the Budget’s current services, or “baseline,” estimates, which are generally consistent with the baseline rules in the Balanced Budget and Emergency Deficit Control Act of 1985 (BBEDCA). The chapter presents estimates of receipts, outlays, and the deficit under this baseline. Two detailed tables addressing factors that affect the baseline and providing details of baseline budget authority and outlays are available at the internet address cited above.

Trust Funds and Federal Funds. This chapter provides summary information about the two fund groups in the Budget—Federal funds and trust funds. In addition, for the major trust funds and certain Federal fund programs, the chapter provides detailed information about income, outgo, and balances.

Comparison of Actual to Estimated Totals. This chapter compares the actual receipts, outlays, and deficit for 2021 with the estimates for that year published in the 2021 Budget.

The following materials are available at the internet address cited above.

Detailed Functional Table

Detailed Functional Table. Table 25–1, “Budget Authority and Outlays by Function, Category, and Program,” displays budget authority and outlays for major Federal program categories, organized by budget function (such as healthcare, transportation, or national defense), category, and program.

Federal Budget by Agency and Account

Federal Budget by Agency and Account. Table 26–1, “Federal Budget by Agency and Account,” displays budget authority and outlays for each account, organized by agency, bureau, fund type, and account.

Calfed Bay-Delta Program Federal Budget Crosscut

Calfed Bay-Delta Program Crosscut. The Calfed Bay-Delta Program interagency budget crosscut report provides an estimate of Federal funding by each of the participating Federal Agencies with authority and pro-

grammatic responsibility for implementing this program, fulfilling the reporting requirements of section 106(c) of Public Law 108–361.

Columbia River Basin Federal Budget Crosscut

Columbia River Basin Federal Budget Crosscut. The Columbia River interagency budget crosscut report includes an estimate of Federal funding by each of the participating Federal agencies to carry out restoration activities within the Columbia River Basin, fulfilling the reporting requirements of section 123 of the Clean Water Act (33 U.S.C. 1275).

Lead Pipe Federal Budget Crosscut

Lead Pipe Federal Budget Crosscut. The lead pipe interagency budget crosscut report provides an estimate of Federal funding by agency that can be used for investments in lead pipe replacement and related activities, fulfilling the commitment made in the Biden-Harris Lead Pipe and Paint Action Plan.

ECONOMIC AND BUDGET ANALYSES

2. ECONOMIC ASSUMPTIONS

This chapter presents the economic assumptions that underlie the Administration's 2023 Budget.¹ It provides an overview of the recent performance of the American economy, presents the Administration's projections for key macroeconomic variables, compares them with forecasts prepared by other prominent institutions, and discusses the unavoidable uncertainty inherent in providing an eleven-year forecast.

This chapter proceeds as follows:

The first section provides an overview of the recent functioning of the U.S. economy, examining the performance of a broad array of key economic indicators.

The second section presents a detailed exposition of the Administration's economic assumptions underlying the 2023 Budget, discussing how key macroeconomic variables are expected to evolve over the years 2022 to 2032.

The third section compares the forecast of the Administration with those of the Congressional Budget Office (CBO), the Federal Open Market Committee of the Federal Reserve, and the Blue Chip panel of professional forecasters.

The fourth section discusses the sensitivity of the Administration's projections of Federal receipts and outlays to alternative paths of macroeconomic variables.

The fifth section considers the errors in past Administrations' forecasts, comparing them with the errors in forecasts produced by the CBO and the Blue Chip panel of professional forecasters.

The sixth section uses information on past accuracy of Administration forecasts to provide understanding and insight into the uncertainty associated with the Administration's current forecast of the budget balance.

Recent Economic Performance

The President took office in the midst of the COVID-19 pandemic. Even as COVID-19 variants posed health and economic challenges throughout 2021, the President's policies helped power a historic economic and jobs recovery. Thanks in part to the American Rescue Plan and the Administration's vaccination program, more than 70 percent of Americans are fully vaccinated, our economy is growing, and Americans are continuing to get back to work.

Economic growth in 2021 far exceeded expectations. When the President took office, the Blue Chip panel of professional forecasters projected that real GDP growth in 2021 (fourth-quarter-over-fourth-quarter) would be 3.9 percent. Instead, 2021 growth was 5.6 percent. More than 6.5 million jobs were created in 2021, a record for any first

year President. The unemployment rate dropped from 6.4 percent in January 2021 to 3.8 percent as of February 2022—lower than the Congressional Budget Office, in its pre-American Rescue Plan baseline, projected we would reach any time this decade and years earlier than they projected the economy would begin to approach that rate. The pandemic and a surge in consumer spending that was concentrated in certain goods sectors—in combination with supply chains and labor supply that were also impacted by the pandemic and unable to keep up—led to elevated prices. However, as discussed below, inflation is expected to gradually moderate over the course of 2022 and beyond as supply chain issues continue to improve and the composition of demand adjusts, although the further Russian invasion of Ukraine has put additional upward pressure on prices in the near term.

Labor Markets—The labor market improved dramatically in 2021. After entering the year at 6.7 percent, the unemployment rate declined throughout 2021 and ended the year at 3.9 percent, falling to 3.8 percent as of February 2022. Likewise, both the median duration of unemployment and the long-term unemployment rate (U1), which measures the percent of the labor force unemployed for 15 weeks or longer, declined dramatically over the course of the year. Other metrics of labor market health, such as the number of workers who identify as marginally attached to the labor force, the number of discouraged workers, and the number of workers working part-time for economic reasons, all exhibited marked improvement during 2021. By December, the number of Americans filing for unemployment reached its lowest level since 1969 – before moving higher during the height of Omicron and then falling again when cases, hospitalizations, and deaths fell.

Despite the large gains in employment, as of February 2022 there remain 2.1 million fewer people employed relative to before the pandemic. The labor force participation rate remains depressed compared to pre-pandemic levels, likely due to a combination of factors. However, the labor force participation rate rose by 0.4 percentage points in 2021, and the prime-age labor force participation rate rose by 0.9 percentage points. Looking ahead, the pace at which Americans rejoin the labor force is currently, and will remain, an important factor in the economic recovery.

Consumption—Consumption by private households is the largest component of the country's economy, accounting for over two-thirds of total output. Because of its large share of GDP, consumer spending growth is essential to economic growth in the United States. Real personal consumption expenditures (PCE), which adjusts for inflation, increased throughout 2021.

A prominent feature of the pandemic has been the extent of the economic damage in specific sectors, par-

¹ Economic performance, unless otherwise specified, is discussed in terms of calendar years (January-December). Budget figures are discussed in terms of fiscal years (October-September).

Table 2-1. ECONOMIC ASSUMPTIONS¹
(Calendar Years, Dollar Amounts in Billions)

	Actual 2020	Projections											
		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Gross Domestic Product (GDP)													
Levels, Dollar Amounts in Billions:													
Current Dollars	20,894	22,899	24,631	25,853	26,966	28,064	29,200	30,379	31,626	32,957	34,382	35,877	37,437
Real, Chained (2012) Dollars	18,385	19,402	20,213	20,786	21,254	21,687	22,120	22,563	23,028	23,526	24,059	24,612	25,178
Chained Price Index (2012=100), Annual Average	114	118	122	125	127	130	132	135	138	140	143	146	149
Percent Change, Fourth-Quarter-over-Fourth- Quarter:													
Current Dollars	−1.0	10.1	6.3	4.6	4.1	4.0	4.0	4.0	4.1	4.3	4.4	4.3	4.3
Real, Chained (2012) Dollars	−2.3	5.1	3.8	2.5	2.1	2.0	2.0	2.0	2.1	2.2	2.3	2.3	2.3
Chained Price Index (2012=100)	1.5	4.8	2.4	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Percent Change, Year-over-Year:													
Current Dollars	−2.2	9.6	7.6	5.0	4.3	4.1	4.0	4.0	4.1	4.2	4.3	4.3	4.3
Real, Chained (2012) Dollars	−3.4	5.5	4.2	2.8	2.2	2.0	2.0	2.0	2.1	2.2	2.3	2.3	2.3
Chained Price Index (2012=100)	1.3	3.9	3.3	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Incomes, Billions of Current Dollars													
Domestic Corporate Profits	1,789	2,195	2,314	2,415	2,383	2,311	2,278	2,247	2,256	2,274	2,299	2,312	2,297
Employee Compensation	11,572	12,442	13,314	14,034	14,657	15,284	15,943	16,634	17,356	18,141	18,993	19,890	20,829
Wages and Salaries	9,444	10,195	10,918	11,493	12,004	12,516	13,055	13,619	14,205	14,848	15,543	16,278	17,054
Nonwage Personal Income	5,274	5,498	5,794	6,124	6,512	6,847	7,184	7,530	7,854	8,202	8,575	8,932	9,236
Consumer Price Index (All Urban)²:													
Level (1982–1984 = 100), Annual Average	258.8	270.9	283.7	290.3	296.9	303.6	310.5	317.5	324.7	332.0	339.6	347.3	355.2
Percent Change, Fourth-Quarter-over-Fourth- Quarter	1.2	6.6	2.9	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
Percent Change, Year-over-Year	1.2	4.6	4.7	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
Unemployment Rate, Civilian, Percent													
Annual Average	8.1	5.4	3.9	3.6	3.7	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
Fourth Quarter Level	6.7	4.5	3.7	3.6	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
Interest Rates, Percent													
91-Day Treasury Bills	0.4	0.0	0.2	0.9	1.6	1.9	2.1	2.2	2.3	2.3	2.3	2.3	2.3
10-Year Treasury Notes	0.9	1.5	2.1	2.5	2.7	2.8	3.0	3.1	3.1	3.2	3.2	3.2	3.3

¹ Based on information available as of mid-October 2021

² Seasonally Adjusted

ticularly services. Notably, while total real consumer spending remains roughly at pre-pandemic trend, consumer spending on services in December 2021 was still below its pre-pandemic level and trend, though up significantly relative to December 2020. While overall real PCE approximately recovered during 2021 to its pre-pandemic trend, the pandemic-driven decline in services spending, and corresponding increase in goods spending, is one of several factors behind the elevated levels of inflation experienced during 2021. A rebalancing of spending away from goods and towards services could help alleviate inflationary pressure in the goods economy, particularly for durable goods.

Nonresidential Fixed Investment—After declining at an annual rate of 5.3 percent in 2020 (year-over-year), real nonresidential fixed investment increased 7.4 percent for 2021. Equipment and intellectual property investment increased 13.0 and 10.2 percent, respectively.

Business structures investment declined for the second consecutive year in 2021, although to a lesser extent than in 2020.

The Government Sector—Topline real government expenditures on consumption and investment increased 0.5 percent in 2021 (year-over-year), which includes a 0.9 percent decline in Federal spending offset by a 0.9 percent increase in State and Local spending. Within the Federal spending category, nondefense spending rose 2.8 percent while defense spending decreased 3.7 percent.

Economic Projections

The Administration's forecast was finalized on November 10, 2021, with the parameters of that forecast close to the consensus prevailing at that date. The forecast informs the 2023 Budget and assumes implementation of the Administration's policy proposals. The