



BOARD OF GOVERNORS
OF THE
FEDERAL RESERVE SYSTEM
WASHINGTON, D. C. 20551

DATE: November 23, 2021

TO: Board of Governors

VIA: Governor Lael Brainard

FROM: Pat McClanahan, Chief Operating Officer
Ricardo Aguilera, Chief Financial Officer

PATRICK

MCCLANAHAN

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SUBJECT: 2022 Board Operating and Capital Budgets¹

Actions Requested

Staff² recommends the Board approve the following:

1. A \$965.9 million operating budget for 2022, as presented in Appendix 1 by division/office and parent account³;
2. A \$20.0 million single-cycle capital budget for 2022, as presented in Figure 5 by category;
3. A \$2,405.5 million multi-cycle capital budget, as presented in Figure 6 by category; and
4. No increase in the Board's authorized position count of 2,979 positions.

Discussion

This is the third budget request since the Board approved the 2020-23 Strategic Plan (the Plan).⁴ The Plan and the budget are organized by functional area, which helps ensure organizational resources are used to advance the Board's mission and provide a structure to fund strategic priorities over the four-year time horizon. We based the 2022 budget request on the principles established by the Plan and provided funding to advance the Plan's goals and objectives.

Figure 1 presents the components of the proposed 2022 budget, including the operating budget, single-cycle capital budget, and multi-cycle capital budget, compared to the 2021 budget and 2021

¹ This memorandum does not include the costs related to the budget of the Office of Inspector General (OIG) or Currency. Those budgets are submitted separately from the Board's budget.

² Steve Bernard, Karen Vassallo, William Futrell, Troy Dibley, Kevin Brooks, Obi Ukwuoma, Shannon Zhang, Peter Madsen, and Max Sinthorntham co-authored this memo.

³ The information presented in Appendices 2 through 6 are for background information only.

⁴ The Plan is located at: <https://www.federalreserve.gov/publications/files/2020-2023-gpra-strategic-plan.pdf>.

forecast⁵. In July 2021, the Board approved an amendment to the 2021 initial operating budget.⁶ The amendment included 92 new authorized positions to address critical needs. The 2021 operating budget figures referenced in this memo refer to the 2021 revised operating budget.

As shown in Figure 1, the 2022 budget components represent the following:

- Operating budget (\$965.9 million)
 - 7.0 percent increase over the 2021 forecast (and a 6.5 percent increase over the 2021 budget) excluding the long-term space plan and Survey of Consumer Finances;
 - 8.9 percent increase over the 2021 forecast (and a 7.8 percent increase over the 2021 budget) excluding the Survey of Consumer Finances; and
 - 10.4 percent increase over the 2021 forecast (and a 9.2 percent increase over the 2021 budget) including these components.
- Single-cycle capital budget (\$20.0 million): 17.6 percent increase over the 2021 forecast (and an 8.7 percent increase from the 2021 budget).
- Multi-cycle capital budget (\$2,405.5 million): 0.2 percent increase over 2021.

Figure 1. Summary of 2022 Budget Components

Component	2021 Budget	2021 Forecast	2022 Budget	Variance 2021F To 2022B		Variance 2021B To 2022B	
				Amount	Percent	Amount	Percent
Ongoing Operations, Including Strategic Priorities	\$ 867.2	\$ 863.7	\$ 923.8	\$ 60.0	7.0%	\$ 56.5	6.5%
Total Without Long-Term Space Plan, Survey	\$ 867.2	\$ 863.7	\$ 923.8	\$ 60.0	7.0%	\$ 56.5	6.5%
Long-Term Space Plan	15.0	10.1	27.5	17.4	173.3%	12.4	n.a.
Total Without Survey	\$ 882.3	\$ 873.8	\$ 951.2	\$ 77.5	8.9%	\$ 69.0	7.8%
Survey of Consumer Finances (Triennial)	2.1	1.4	14.7	13.3	961.1%	12.6	592.1%
Grand Total, Operating Budget	\$ 884.4	\$ 875.2	\$ 965.9	\$ 90.8	10.4%	\$ 81.5	9.2%
Single-Cycle Capital Budget	\$ 18.4	\$ 17.0	\$ 20.0	\$ 3.0	17.6%	\$ 1.6	8.7%
Multi-Cycle Capital Budget	\$2,400.4	\$2,400.4	\$2,405.5	\$ 5.1	0.2%	\$ 5.1	0.2%

Note: Components may not sum to totals and may not yield percentages shown because of rounding.

We identified several strategic priorities during the budget formulation process and funded these priorities within the budgets of each functional area:

Monetary Policy and Financial Stability

Goal 1 in the Plan facilitates efforts that support the congressional mandate for price stability and maximum employment through monetary policy. Specific initiatives include:

Continuing Initiatives:

- Developing additional secure electronic systems to fully replace paper-based content

⁵ Projected spending is based on actual expenses incurred through August 2021, current staffing levels, approved personnel actions, and anticipated spending for the last four months of the year.

⁶ The 2021 budget amendment is located at: <https://www.federalreserve.gov/foia/readingrooms.htm>.

delivery to policymakers and staff.

- Establishing cloud-based capabilities that accelerate research and innovation. This initiative augments workforce skills and builds capacity; provides an adaptive computing environment for data intensive workloads; and streamlines processes for governance, finance, risk, and compliance to maintain Board's leadership in economic modeling and data-driven policymaking.

New Initiative:

- Supporting policymakers' understanding of the effects of climate developments on economic activity, financial conditions, monetary policy, and supervised firms through research, modeling, and analysis.

Supervision

Goal 2 in the Plan promotes safety, soundness, and stability of financial institutions and consumer protection. Specific initiatives include:

Continuing Initiatives:

- Enhancing data reporting, storage, and management capabilities through software development projects to keep pace with financial technology innovation and operational vulnerabilities.
- Streamlining and advancing data strategy and governance processes by investing in enterprise information management and governance expertise.
- Creating a more robust data infrastructure by investing in modern software and hardware resources, which will improve, standardize, and automate business processes.
- Developing a financial market infrastructure (FMI) participation database to organize and track the large network of FMIs and related risks, which will increase efficiency, reduce processing times, and enhance decision-making.

New Initiative:

- Evaluating and aligning the System supervision function with the changing environment to keep pace with the advances in technological and analytical capabilities and ensure that an effective, efficient, and timely supervision program is maintained.

Payment System and Reserve Bank Oversight

Goal 3 in the Plan fosters a safe, efficient, and accessible payment and settlement system. Specific initiatives include:

Continuing Initiative:

- Enhancing the Payment Data Repository (PDR) related to various Reserve Bank oversight responsibilities and FMIs to increase the effectiveness and efficiency of the Board's oversight work and analysis.

New Initiatives:

- Supporting payment infrastructure modernization through experimentation program to assesses the risk and opportunities associated with digital currencies, including central bank digital currencies.
- Investigating and implementing a system/tool to efficiently and effectively track various

items related to banknotes that are received or distributed to others for use in testing and evaluating equipment and processes related to currency processing.

- Assessing solutions to replace and streamline legacy applications for recordkeeping and accountability of Federal Reserve notes and collateral.

Public Engagement and Community Development

Goal 4 in the Plan promotes broader, ongoing engagement with external individuals and groups and improved understanding of the Board's mission through outreach and public engagement.

Specific initiatives include:

Continuing Initiatives

- Implementing a modern, streamlined technology portfolio that disseminates sensitive information for Board review and consideration; facilitates Board decision-making; and ensures compliance with legal and regulatory requirements, such as the Government in the Sunshine Act, the Freedom of Information Act (FOIA), and the Federal Records Act. This initiative will promote effective information management within the Board and the Federal Reserve System, address cybersecurity risks, and automate business processes.
- Implementing a tool to effectively review, analyze, and tag large amounts of documents/files in support of the Community Reinvestment Act (CRA) modernization project, particularly the Advanced Notice of Proposed Rulemaking (ANPR) effort.

Mission Enablement (Support and Overhead)

Goal 5 in the Plan optimizes operations and capabilities through efficient, effective, and sustainable stewardship and governance of resources. Specific initiatives include:

Continuing Initiatives:

- Implementing a long-term space plan, including a facilities workplace strategy, to provide a secure, modern environment that meets the needs of the Board's workforce and leverages opportunities to increase collaboration, efficiency, productivity, and sustainability.
- Creating a digital workspace in alignment with the modernization of the Board's facilities and changes in the workplace landscape to improve staff productivity and collaboration.
- Implementing division-specific workforce plans to ensure the current and future workforce has the abilities, knowledge, and skills necessary to carry out the Board's mission. Specifically, the initiative is a future-focused, data-driven evaluation and includes the identification and assessment of job specific competencies and talent recommendations to close gaps.
- Replacing the Board's human capital, financial management, and procurement systems which will offer opportunities to enhance organizational efficiencies while providing automation and analytical capabilities that respond to stakeholder needs.
- Replacing legacy applications, including IT service management, customer relationship management, and time tracking systems, with a cloud-based solution that provides greater stability, functionality, and scalability to automate existing operational processes.
- Developing an electronic database to consolidate and store employee ethics disclosures and records to reduce or eliminate reliance on paper records and boost productivity.

New Initiatives:

- Managing enterprise risk in the Board's information security and privacy functions to evolve organizational capabilities and be responsive to increasing levels of regulatory mandates.
- Replacing legacy statistics systems to automate processes, improve flexibility and efficiencies, and consolidate communications among the Board, Reserve Banks, and reporting entities.
- Automating workforce data processing to streamline processes and improve analytics to meet workforce needs in a rapidly changing environment.
- Implementing a data management tool to centralize and enhance data cataloging, governance, lineage, and quality, as well as metadata management, improve search, analytical, and reporting capabilities, and provide integrated data for decision-making.
- Improving and expanding systems and processes supporting the delivery of Board data releases to the public as part of OPEN Government Data Act compliance.
- Modernizing technology roles across the Board through workforce planning efforts by upskilling technologists in agile ways of working to better meet the Board's evolving automation demands.

The following sections provide additional information.

2022 Operating Budget

At the start of the budget process, the Chief Operating Officer (COO) and Chief Financial Officer (CFO) met with the Committee on Board Affairs (CBA) to recommend a specific growth target for the Board's overall 2022 operating budget. The CBA approved a forecast-to-budget growth target of 8.9 percent, excluding the impact of the Survey of Consumer Finances.

Growth in 2022 is driven by strategic priorities for 2022, known changes in the run-rate of the Board's ongoing operations, the full-year impact of the budget amendment, long-term space plan, and increases to centrally managed retirement and post-retirement benefits.

Figure 2 presents the 2021 operating budget, 2021 forecast, and proposed 2022 budget by functional area. Excluding the impact of the Survey of Consumer Finances, the proposed 2022 operating budget represents growth of 8.9 percent over the 2021 forecast, in alignment with CBA targets. Appendix 1 presents the proposed 2022 budget by division/office and parent account. Appendices 2 and 3 presents the 2021 operating budget, 2021 forecast, and proposed 2022 budget by division/office and account, respectively.

Growth for each functional area is affected by the initiatives previously discussed as well as average number of personnel (ANP)⁷ growth discussed in the Personnel Services Costs sub-section below. Specifically, growth in the Monetary Policy and Financial Stability and Supervision

⁷ ANP, which is analogous to full-time equivalents, includes Board staff and contractors.

functional areas are driven by higher-than-average ANP growth due to new budget amendment positions. Growth in the Mission Enablement (Support and Overhead) functional area is 6.3 percent excluding the impact of the long-term space plan; growth in this functional area is driven by strategic priorities, including the NextGen transformation project⁸ and other approved technology initiatives.

Figure 2. Board 2022 Operating Budget by Functional Area

Millions of dollars									
Functional Area	2021 Budget	2021 Forecast	Variance 2021F To 2021B		2022 Budget	Variance 2021F To 2022B		Variance 2021B To 2022B	
			Amount	Percent		Amount	Percent	Amount	Percent
Monetary Policy and Financial Stability	\$ 207.5	\$ 210.4	\$ 2.9	1.4%	\$ 229.0	\$ 18.7	8.9%	\$ 21.5	10.4%
Supervision	196.7	194.9	(1.9)	-0.9%	208.9	14.0	7.2%	12.1	6.2%
Payment System and Reserve Bank Oversight	43.3	42.1	(1.2)	-2.7%	43.5	1.4	3.2%	0.2	0.5%
Public Engagement and Community Development	20.7	21.1	0.4	2.2%	21.9	0.7	3.4%	1.2	5.6%
Mission Enablement (Support and Overhead)	414.0	405.2	(8.8)	-2.1%	448.0	42.8	10.6%	34.0	8.2%
Total Without Survey	\$ 882.3	\$ 873.8	\$ (8.5)	-1.0%	\$ 951.2	\$ 77.5	8.9%	\$ 69.0	7.8%
Survey of Consumer Finances	2.1	1.4	(0.7)	-34.8%	14.7	13.3	961.1%	12.6	592.1%
Grand Total	\$ 884.4	\$ 875.2	\$ (9.3)	-1.0%	\$ 965.9	\$ 90.8	10.4%	\$ 81.5	9.2%

Note: Each functional area includes allocations related to centrally managed retirement and post-retirement benefits, which fluctuate due to changes in actuarial assumptions and demographics. Divisions/sections are mapped into functional areas based on work performed. Annual mapping validations may cause adjustments from one year to the next. Mission Enablement (Support and Overhead) includes most technology projects. Components may not sum to totals and may not yield percentages shown because of rounding.

Personnel Services Costs

The proposed 2022 operating budget includes growth in personnel services costs of \$35.4 million (5.2 percent) over the 2021 forecast and \$47.6 million (7.1 percent) over the 2021 budget, as shown in Appendix 3.

Increases in personnel expenses reflect the following:

- Employment growth expected to occur in 2022 driven by the filling of budget amendment positions approved in mid-2021 and additional contractors⁹ to execute strategic technology projects;
- Salary adjustments, including promotions and equity adjustments, completed during 2021 and anticipated for 2022;
- Funding for the 2022 merit and variable pay programs approved by the Board in 2021 but expensed in 2022; and
- Projected increases to healthcare and centrally managed retirement and post-retirement benefits, which fluctuate due to changes in actuarial assumptions and demographics.

⁸ This initiative replaces the Board's human capital, financial management, and procurement systems, and will offer opportunities to enhance organizational efficiencies and capabilities to provide automation solutions that respond to stakeholder needs.

⁹ For 2022, contractor expenses that met the ANP definition were moved from goods and services to personnel services to provide a more complete view of personnel expenses (see Appendix 3, Outside Agency Help). This change is in alignment with the Reserve Banks.

For 2022, authorized positions remain at 2,979 positions. The proposed 2022 budget fully funds costs for 9 positions remaining in the Board’s centralized position pool. Appendix 4 reflects positions by division/office.

Figure 3 presents ANP for 2021 and 2022 by functional area, while appendix 5 reflects ANP by division/office. For 2022, budgeted ANP is expected to grow by 99 ANP (3.3 percent) over the 2021 forecast and 70 ANP (2.3 percent) over the 2021 budget. This growth is driven by the filling of budget amendment positions and additional contractors to execute strategic technology projects. As previously discussed, functional areas grow at different rates in 2022.

Figure 3. ANP by Functional Area

Functional Area	2021 Budgeted ANP	2021 Forecasted ANP	2022 Budgeted ANP	Variance 2021F To 2022B		Variance 2021B To 2022B	
				Amount	Percent	Amount	Percent
Monetary Policy and Financial Stability	755	764	793	29	3.8%	38	5.0%
Supervision	698	696	719	23	3.4%	21	3.1%
Payment System and Reserve Bank Oversight	148	143	144	1	0.6%	(4)	-2.7%
Public Engagement and Community Development	93	95	95	1	0.6%	2	2.7%
Mission Enablement (Support and Overhead)	1,319	1,286	1,331	45	3.5%	12	0.9%
Grand Total	3,013	2,984	3,083	99	3.3%	70	2.3%

Note: Divisions/sections are mapped into functional areas based on work performed. Annual mapping validations may cause adjustments from one year to the next. Average number of personnel (ANP) includes Board staff and contractors. The 2021 budget figures referenced refer to the 2021 revised budget. Components may not sum to totals and may not yield percentages shown because of rounding.

Goods and Services Costs

The proposed 2022 operating budget includes growth in goods and services costs of \$42.0 million (21.8 percent) over the 2021 forecast and \$21.4 million (10.0 percent) over the 2021 budget, as shown in Appendix 3.

Increases in goods and services reflect the following:

- Long-term space plan impacts, which include depreciation triggered by the substantial completion of the Martin renovation project in 2021, public art purchases for the Eccles and 1951 buildings, and on-boarding of janitorial services for the newly renovated Martin building;
- Step-up approach to travel and training expenses, which were significantly impacted by COVID-19 in 2021; 2022 expenses for division travel reflect 50 percent of pre-pandemic levels due to changing business travel practices; this approach is aligned with the Reserve Banks;
- Investment in strategic priorities previously mentioned; and
- Run-rate growth for other goods and services accounts.

Survey of Consumer Finances

The proposed 2022 operating budget represents an increase of \$13.3 million over the 2021 forecast and \$12.6 million over the 2021 budget, as shown in Appendix 3, as the bulk of costs for the new triennial Survey of Consumer Finances occur in 2022. The survey collects information about family incomes, net worth, balance sheet components, credit use, and other financial outcomes.

Multi-Year Projects

Figure 4 summarizes the project life budgets of two significant, multi-year projects.

Staff request that the Board approve the following multi-year project life budgets:

- Long-term space plan (\$2,770.0 million¹⁰): No changes since the approval of the 2021 budget. We incorporated operating costs for 2022 as part of this budget request. Capital expenditures are already included as part of the multi-cycle capital budget.
- NextGen transformation (\$120.6 million): This initiative replaces the Board’s human capital, financial management, and procurement systems, and will offer opportunities to enhance organizational efficiencies and capabilities to provide automation solutions that respond to stakeholder needs. The proposed increase replenishes project contingency funds that were exhausted during the initial design phase and implementation consultant onboarding. We incorporated operating costs for 2022 as part of this budget request. Capital expenditures are already included as part of the multi-cycle capital budget.

Figure 4. Multi-Year Projects

Millions of dollars	Current Project Life Budget	Changes	New Project Life Budget
Project			
Operating Expenses	\$ 438.6	\$ -	\$ 438.6
Capital Expenditures	2,331.4	-	2,331.4
Long-Term Space Plan	\$ 2,770.0	\$ -	\$ 2,770.0
Operating Expenses	90.5	8.2	98.7
Capital Expenditures	21.9	-	21.9
NextGen Transformation	\$ 112.4	\$ 8.2	\$ 120.6

Note: Components may not sum to totals and may not yield percentages shown because of rounding. Capital expenditures for the long-term space plan include all current building improvement projects (\$2,331.0 million) and the Eccles historic roof replacement project (\$0.4 million), which was closed with the approval of the 2021 budget. The NextGen transformation project includes internal labor costs.

¹⁰ In May 2018, the Board approved the purchase of 1951 Constitution Avenue NW (“1951”) and the transition to a mixed-use space as part of a long-term space plan. The long-term space plan will provide a secure, modern environment that meets the needs of the Board’s workforce and leverages opportunities to increase collaboration, efficiency, productivity, and sustainability. In addition, the plan will yield financial benefits to the Board over the long term.

Capital Budget

The Board's capital budget consists of single-cycle and multi-cycle components. Divisions complete single-cycle capital projects, such as hardware purchases and software upgrades, within the current budget cycle, while multi-cycle capital projects, such as building improvements and certain automation initiatives, span several budget cycles.

Figure 5 summarizes the Board's 2022 single-cycle capital budget request by category. The proposed 2022 single-cycle capital budget of \$20.0 million represents an increase of \$3.0 million (17.6 percent) from the 2021 forecast and an increase of \$1.6 million (8.7 percent) from the 2021 budget; the increase is driven by supply chain delays which shifted data center infrastructure purchases from 2021 to 2022. The proposed budget also includes continued investments in automation projects and routine lifecycle replacements of equipment and building components.

Figure 5. Single-Cycle Capital Budget by Category

Category	2021		2022 Budget	Variance 2021F To 2022B		Variance 2021B To 2022B	
	Budget	Forecast		Amount	Percent	Amount	Percent
	Millions of dollars						
Data Center Infrastructure	\$ 6.6	\$ 7.7	\$ 7.8	\$ 0.2	2.4%	\$ 1.3	19.0%
Building Improvements	2.9	3.0	4.1	1.1	37.5%	1.3	45.3%
Automation Projects	0.7	0.0	0.6	0.6	n.a.	(0.1)	-10.7%
Supervision Data Capabilities	0.2	-	-	-	n.a.	(0.2)	-100.0%
Equipment Purchases & Lifecycle Replacements	8.1	6.4	7.4	1.1	16.7%	(0.7)	-8.8%
Grand Total	\$ 18.4	\$ 17.0	\$ 20.0	\$ 3.0	17.6%	\$ 1.6	8.7%

Note: Components may not sum to totals and may not yield percentages shown because of rounding. Starting in 2022, supervision data capabilities has been consolidated under automation projects.

Figure 6 summarizes the proposed multi-cycle capital budget of \$2,405.5 million by category, while appendix 6 reflects the multi-cycle capital budget by project/program.

Figure 6. Multi-Cycle Capital Budget by Category

Category	Current Project Life Budget	Initiatives/ Project Closures	New Project Life Budget	Estimated Project Life Spending Through Year-End 2021		2022 Expected Expenditures
				Dollars	% Spent	
				Millions of dollars		
Building Improvements	\$ 2,331.0	\$ -	\$ 2,331.0	\$ 525.4	22.5%	\$ 99.1
Data Strategy	18.0	-	18.0	10.7	59.3%	0.8
Automation	51.4	5.1	56.5	25.7	49.9%	19.0
Security Enhancements	-	-	-	-	n.a.	-
Grand Total	\$ 2,400.4	\$ 5.1	\$ 2,405.5	\$ 561.7	23.4%	\$ 118.9

Note: Components may not sum to totals and may not yield percentages shown because of rounding. Starting with the 2022 budget, the supervision data capabilities category has been consolidated under the automation projects category.

The proposed budget reflects funding for new and existing automation capital projects and programs.

- Additional funding for existing projects and programs:
 - Regulation, Analysis, and Modeling Platform (RAMP) (\$1.7 million increase): Request is to continue development on the data store of record for stress testing projections and results.
 - ServiceNow enterprise solution (\$0.5 million increase): Request is to replace legacy applications, including IT service management, customer relationship management, and time tracking systems, with a cloud-based solution that provides greater stability, functionality, and scalability to automate existing operational processes.
- New funding for the following projects and programs:
 - Board statistics portfolio modernization (\$2.4 million): Request is to replace legacy statistics systems, automating processes, improving flexibility and efficiencies, and consolidating communications among the Board, Reserve Banks, and reporting entities.
 - Ethics program support (\$0.8 million): Request is to develop an electronic database, consolidating and storing employee ethics disclosures and records to reduce or eliminate reliance on paper records and boost productivity.
 - Cybersecurity initiatives (\$2.2 million): Request is to manage enterprise risk in the Board's information security and privacy functions to evolve organizational capabilities and be responsive to increasing levels of regulatory mandates.
 - Data download program (DDP) (\$0.9 million): Request is to improve and expand systems and processes supporting the delivery of Board data releases to the public as part of OPEN Government Data Act compliance.
 - Data management platform (\$0.8 million): Request is to implement a data management tool to centralize and enhance data cataloging, governance, lineage, and quality, as well as metadata management, improve search, analytical, and reporting capabilities, and provide integrated data for decision-making.

In addition, the proposed budget includes the closure of three completed projects and programs: information portal (C&CA), HR/financial management enterprise resource planning (ERP) operating system upgrade, and Payments Data Repository (PDR).

2021 Budget Performance

Staff forecast the Board to underrun its 2021 operating budget by \$9.3 million, or 1.0 percent. Figure 2 presents forecasted budget performance by functional area, while Appendices 2 and 3 contain budget performance by division/office and account, respectively. As shown in Appendix 3, staff forecast personnel services expenses to overrun the budget by \$12.2 million (1.8 percent)

and goods and services expenses to underrun the budget by \$20.7 million (9.7 percent).¹¹ Largely, funding approved as part of the budget amendment is expected to be spent. Expenses related to the Survey of Consumer Finances are expected to underrun the 2021 budget by \$0.7 million (34.8 percent). The overrun in personnel services is driven by lower vacancy rates in several divisions, higher accrued annual leave expenses (employees took less leave during the COVID-19 pandemic), and higher pension expenses. The underrun in goods and services is driven by reduced employee travel and training due to the COVID-19 pandemic, less contractor usage due to project delays and overly optimistic division budget inputs, and the shift in the substantial completion of the Martin renovation project.

Staff forecast a \$16.3 million overexpenditure within centrally managed benefits (see Appendix 2),¹² which is driven by higher accrued annual leave expenses (employees took less leave during the COVID-19 pandemic) and higher pension expenses. The CFO will approve these overexpenditures since they do not require Board action as they are solely related to non-cash transactions and the operating budget is not forecast to overrun in 2021. Finally, the Board previously approved overexpenditures within personnel services for Research & Statistics, which were driven by lower-than-budgeted vacancy rates.

¹¹ For 2022, contractor expenses that met the ANP definition were moved from goods and services to personnel services to provide a more complete view of personnel expenses (see Appendix 3, Outside Agency Help). This change is in alignment with the Reserve Banks. Without this change, personnel services is forecast to overrun the budget by \$14.2 million (2.2 percent) and goods and services is forecast to underrun by \$22.7 million (9.2 percent).

¹² Includes centralized Boardwide benefit programs, such as accrued annual leave, academic assistance, and relocation, and retirement and post-retirement benefits, which fluctuate due to changes in actuarial assumptions and demographics.

APPENDICES

Appendix 1. Board 2022 Operating Budget by Division/Office and Parent Account

Millions of dollars Division/Office	Parent Account		2022 Budget
	Personnel Services	Goods & Services	
Research & Statistics (R&S)	\$ 85.2	\$ 15.1	\$ 100.3
International Finance (IF)	36.8	3.4	40.2
Monetary Affairs (MA)	43.9	2.0	45.8
Financial Stability (FS)	19.1	1.2	20.3
Supervision & Regulation (S&R)	116.9	11.8	128.7
Consumer & Community Affairs (C&CA)	35.0	3.8	38.8
Reserve Bank Operations & Payment Systems (RBOPS)	39.6	9.4	49.0
Board Members (BDM)	23.8	3.6	27.4
Secretary (OSEC)	9.9	0.5	10.4
Legal	34.0	2.3	36.3
Chief Operating Officer (COO)	13.3	2.4	15.7
Financial Management (DFM)	14.7	0.5	15.2
Information Technology (IT)	95.5	53.0	148.5
Management (MGT)	82.2	103.6	185.8
Centrally Managed Benefits ¹	52.2	2.8	55.0
Extraordinary Items ²	20.6	33.5	54.1
Savings & Reallocations ³	(6.6)	(13.7)	(20.3)
Total Without Survey	\$ 716.2	\$ 235.0	\$ 951.2
Survey of Consumer Finances	-	14.7	14.7
Grand Total	\$ 716.2	\$ 249.7	\$ 965.9

Note: Components may not sum to totals and may not yield percentages shown because of rounding.

1. For 2022, Special Projects and Retirement and Benefits have been merged. Centrally Managed Benefits includes centralized Boardwide benefit programs, such as accrued annual leave, academic assistance, and relocation, and retirement and post-retirement benefits, which fluctuate due to changes in actuarial assumptions and demographics.
2. Strategic initiatives will continue to be centralized within Extraordinary Items. Also includes the centralized position pool.
3. Includes negative centralized budget execution and forecast adjustments and Board support and overhead allocations to the OIG and Currency.

Appendix 2. Board 2022 Operating Budget by Division/Office

Millions of dollars Division/Office	2021 Budget	2021 Forecast	Variance 2021F To 2021B		2022 Budget	Variance 2021F To 2022B		Variance 2021B To 2022B	
			Amount	Percent		Amount	Percent	Amount	Percent
Research & Statistics (R&S)	\$ 93.5	\$ 94.7	\$ 1.2	1.2%	\$ 100.3	\$ 5.7	6.0%	\$ 6.8	7.3%
International Finance (IF)	37.3	37.3	0.0	0.0%	40.2	2.9	7.8%	2.9	7.8%
Monetary Affairs (MA)	42.6	42.1	(0.5)	-1.1%	45.8	3.7	8.9%	3.3	7.7%
Financial Stability (FS)	17.0	16.8	(0.2)	-1.1%	20.3	3.6	21.3%	3.4	19.9%
Supervision & Regulation (S&R)	123.5	120.1	(3.4)	-2.8%	128.7	8.6	7.2%	5.2	4.2%
Consumer & Community Affairs (C&CA)	35.9	35.4	(0.5)	-1.4%	38.8	3.4	9.6%	2.9	8.0%
Reserve Bank Operations & Payment Systems (RBOPS)	46.9	46.2	(0.7)	-1.5%	49.0	2.8	6.1%	2.1	4.5%
Board Members (BDM)	26.2	26.1	(0.2)	-0.7%	27.4	1.3	5.2%	1.2	4.4%
Secretary (OSEC)	9.8	9.6	(0.1)	-1.1%	10.4	0.7	7.5%	0.6	6.3%
Legal	34.5	34.1	(0.4)	-1.1%	36.3	2.2	6.5%	1.8	5.2%
Chief Operating Officer (COO)	15.1	13.9	(1.2)	-8.0%	15.7	1.8	12.7%	0.6	3.7%
Financial Management (DFM)	14.6	14.6	(0.0)	-0.1%	15.2	0.6	4.4%	0.6	4.3%
Information Technology (IT)	140.0	139.0	(1.0)	-0.7%	148.5	9.5	6.8%	8.4	6.0%
Management (MGT)	167.6	167.7	0.1	0.1%	185.8	18.1	10.8%	18.2	10.9%
Centrally Managed Benefits ¹	47.0	63.3	16.3	34.6%	55.0	(8.3)	-13.1%	8.0	17.0%
Extraordinary Items ²	51.1	37.7	(13.4)	-26.2%	54.1	16.4	43.4%	3.0	5.8%
Savings & Reallocations ³	(20.3)	(24.8)	(4.5)	22.1%	(20.3)	4.5	-18.0%	(0.0)	0.2%
Total Without Survey	\$ 882.3	\$ 873.8	\$ (8.5)	-1.0%	\$ 951.2	\$ 77.5	8.9%	\$ 69.0	7.8%
Survey of Consumer Finances	2.1	1.4	(0.7)	-34.8%	14.7	13.3	961.1%	12.6	592.1%
Grand Total	\$ 884.4	\$ 875.2	\$ (9.3)	-1.0%	\$ 965.9	\$ 90.8	10.4%	\$ 81.5	9.2%

Note: Components may not sum to totals and may not yield percentages shown because of rounding.

1. For 2022, Special Projects and Retirement and Benefits have been merged. Centrally Managed Benefits includes centralized Boardwide benefit programs, such as accrued annual leave, academic assistance, and relocation, and retirement and post-retirement benefits, which fluctuate due to changes in actuarial assumptions and demographics.
2. Strategic initiatives will continue to be centralized within Extraordinary Items. Also includes the centralized position pool.
3. Includes negative centralized budget execution and forecast adjustments and Board support and overhead allocations to the OIG and Currency.

Appendix 3. Board 2022 Operating Budget by Account

Millions of dollars									
Account	2021 Budget	2021 Forecast	Variance 2021F To 2021B		2022 Budget	Variance 2021F To 2022B		Variance 2021B To 2022B	
			Amount	Percent		Amount	Percent	Amount	Percent
Salaries	\$ 503.9	\$ 508.9	\$ 5.0	1.0%	\$ 535.7	\$ 26.8	5.3%	\$ 31.8	6.3%
Outside Agency Help ¹	33.9	31.8	\$ (2.0)	-6.0%	38.3	6.4	20.2%	4.4	13.0%
Retirement/Thrift Plans	70.3	75.5	5.1	7.3%	78.0	2.5	3.4%	7.7	10.9%
Employee Insurance	43.9	42.9	(1.0)	-2.4%	45.6	2.7	6.4%	1.7	3.9%
Net Periodic Benefits Costs ²	16.5	21.6	5.1	30.7%	18.5	(3.0)	-14.0%	2.0	12.4%
Sub-Total, Personnel Services	\$ 668.6	\$ 680.8	\$ 12.2	1.8%	\$ 716.2	\$ 35.4	5.2%	\$ 47.6	7.1%
Postage & Shipping	0.6	0.7	0.0	3.6%	0.3	(0.4)	-56.1%	(0.3)	-54.5%
Travel	9.4	3.1	(6.3)	-67.2%	9.2	6.1	197.8%	(0.2)	-2.4%
Telecommunications	8.3	6.4	(1.9)	-23.2%	7.1	0.7	10.8%	(1.2)	-15.0%
Printing & Binding	0.7	0.6	(0.1)	-14.4%	0.7	0.0	3.7%	(0.1)	-11.2%
Publications	0.3	0.4	0.0	13.8%	0.3	(0.0)	-12.2%	-	0.0%
Stationery & Supplies	1.0	0.9	(0.1)	-12.5%	1.1	0.2	21.2%	0.1	6.0%
Software	29.8	28.2	(1.6)	-5.3%	35.6	7.4	26.3%	5.8	19.6%
Furniture & Equipment (F&E)	6.9	7.2	0.3	4.4%	10.0	2.8	38.4%	3.1	44.4%
Rentals	38.0	37.8	(0.2)	-0.5%	37.5	(0.3)	-0.7%	(0.4)	-1.2%
Data, News, & Research	16.4	17.4	1.0	5.9%	21.0	3.6	20.9%	4.6	28.1%
Utilities	1.7	1.8	0.1	6.5%	1.9	0.2	8.7%	0.3	15.8%
Repairs & Alterations - Building	4.7	4.0	(0.6)	-13.9%	4.9	0.9	22.1%	0.2	5.1%
Repairs & Maintenance - F&E	5.0	4.8	(0.3)	-5.5%	5.5	0.7	14.6%	0.4	8.3%
Contractual Professional Services (CPS) ¹	43.5	38.7	(4.8)	-11.1%	49.2	10.5	27.0%	5.7	13.0%
Interest	0.0	0.0	(0.0)	-22.4%	0.0	(0.0)	-33.5%	(0.0)	-48.4%
Training & Dues	4.9	3.1	(1.8)	-37.3%	6.0	2.9	95.3%	1.1	22.4%
Subsidies & Contributions	3.2	3.1	(0.1)	-2.3%	3.2	0.1	4.0%	0.1	1.6%
All Other	4.0	4.9	0.9	23.2%	5.1	0.1	2.9%	1.1	26.8%
Depreciation/Amortization	56.2	51.6	(4.6)	-8.3%	59.9	8.3	16.1%	3.7	6.5%
Support & Overhead Allocations ³	(16.9)	(17.6)	(0.7)	4.1%	(19.1)	(1.4)	8.2%	(2.1)	12.6%
IT Income ⁴	(0.3)	0.0	0.3	-100.0%	-	(0.0)	-100.0%	0.3	-100.0%
Income	(3.9)	(4.0)	(0.1)	3.2%	(4.4)	(0.4)	11.0%	(0.6)	14.5%
Sub-Total, Goods & Services	\$ 213.7	\$ 193.0	\$ (20.7)	-9.7%	\$ 235.0	\$ 42.0	21.8%	\$ 21.4	10.0%
Total Without Survey	\$ 882.3	\$ 873.8	\$ (8.5)	-1.0%	\$ 951.2	\$ 77.5	8.9%	\$ 69.0	7.8%
Survey of Consumer Finances	2.1	1.4	(0.7)	-34.8%	14.7	13.3	961.1%	12.6	592.1%
Grand Total	\$ 884.4	\$ 875.2	\$ (9.3)	-1.0%	\$ 965.9	\$ 90.8	10.4%	\$ 81.5	9.2%

Note: Components may not sum to totals and may not yield percentages shown because of rounding.

1. For 2022, contractor expenses that met the ANP definition were moved from goods and services (CPS) to personnel services (Outside Agency Help) to provide a more complete view of personnel expenses. This change is in alignment with the Reserve Banks. For comparability, changes are also reflected for 2021 budget and forecast.

2. Net periodic benefits costs other than services costs related to pension and post-retirement benefits.

3. Support & Overhead Allocations include a net zero transfer of costs from the Board operating budget to the OIG and Currency operating budgets for Board support and overhead expenses attributable to the OIG and Currency.

4. Includes other earned income collected from the Currency budget.

Appendix 4. Positions by Division/Office

Division/Office	2021	2021	Variance		2022	Variance		Variance	
	Budget	Current	2021C To 2021B		Budget	2021C To 2022B		2021B To 2022B	
			Amount	Percent		Amount	Percent	Amount	Percent
Research & Statistics (R&S)	364	364	-	0.0%	364	-	0.0%	-	0.0%
International Finance (IF)	166	168	2	1.2%	168	-	0.0%	2	1.2%
Monetary Affairs (MA)	186	186	-	0.0%	186	-	0.0%	-	0.0%
Financial Stability (FS)	80	80	-	0.0%	80	-	0.0%	-	0.0%
Supervision & Regulation (S&R)	497	497	-	0.0%	497	-	0.0%	-	0.0%
Consumer & Community Affairs (C&CA)	138	138	-	0.0%	138	-	0.0%	-	0.0%
Reserve Bank Operations & Payment Systems (RBOPS)	187	187	-	0.0%	187	-	0.0%	-	0.0%
Board Members (BDM)	121	123	2	1.7%	123	-	0.0%	2	1.7%
Secretary (OSEC)	54	55	1	1.9%	55	-	0.0%	1	1.9%
Legal	132	132	-	0.0%	132	-	0.0%	-	0.0%
Chief Operating Officer (COO)	65	65	-	0.0%	65	-	0.0%	-	0.0%
Financial Management (DFM)	72	72	-	0.0%	72	-	0.0%	-	0.0%
Information Technology (IT)	418	418	-	0.0%	418	-	0.0%	-	0.0%
Management (MGT)	485	485	-	0.0%	485	-	0.0%	-	0.0%
Extraordinary Items ¹	14	9	(5)	-35.7%	9	-	0.0%	(5)	-35.7%
Grand Total	2,979	2,979	-	0.0%	2,979	-	0.0%	-	0.0%

1. Includes the centralized position pool.

Appendix 5. ANP by Division/Office

Division/Office	2021	2021	Variance		2022	Variance		Variance	
	Budget	Forecast	2021F To 2021B		Budget	2021F To 2022B		2021B To 2022B	
			Amount	Percent		Amount	Percent	Amount	Percent
Research & Statistics (R&S)	353	359	6	1.7%	362	3	0.7%	9	2.4%
International Finance (IF)	155	157	2	1.2%	163	6	3.7%	8	4.9%
Monetary Affairs (MA)	174	174	(0)	0.0%	181	7	3.8%	7	3.8%
Financial Stability (FS)	68	67	(1)	-1.1%	78	11	16.0%	10	14.7%
Supervision & Regulation (S&R)	482	482	0	0.0%	490	8	1.7%	8	1.7%
Consumer & Community Affairs (C&CA)	133	134	1	0.4%	140	6	4.6%	7	5.0%
Reserve Bank Operations & Payment Systems (RBOPS)	172	174	2	0.9%	179	5	2.9%	7	3.8%
Board Members (BDM)	124	122	(2)	-1.9%	122	0	0.2%	(2)	-1.7%
Secretary (OSEC)	51	52	1	2.9%	54	1	2.4%	3	5.4%
Legal	119	119	0	0.2%	124	5	4.4%	5	4.6%
Chief Operating Officer (COO)	56	52	(4)	-6.7%	60	8	14.4%	4	6.7%
Financial Management (DFM)	71	72	1	1.3%	72	(0)	-0.3%	1	1.0%
Information Technology (IT)	494	491	(2)	-0.5%	479	(12)	-2.5%	(15)	-3.0%
Management (MGT)	497	486	(11)	-2.3%	489	3	0.6%	(8)	-1.7%
Extraordinary Items	67	54	(14)	-20.2%	116	62	116.1%	49	72.4%
Savings & Reallocations ¹	(5)	(12)	(7)	138.9%	(26)	(13)	106.2%	(20)	392.7%
Grand Total	3,013	2,984	(29)	-1.0%	3,083	99	3.3%	70	2.3%

Note: Average number of personnel (ANP) includes Board staff and contractors. The 2021 budget figures referenced refer to the 2021 revised budget. Components may not sum to totals and may not yield percentages shown because of rounding.

1. Includes negative centralized budget execution and forecast adjustments.

Appendix 6. Multi-Cycle Capital Budget by Project/Program

Millions of dollars						
Project/Program	Current Project Life Budget	Initiatives/ Project Closures	New Project Life Budget	Estimated Project Life Spending Through Year-End 2021		2022 Expected Expenditures
				Dollars	% Spent	
Martin renovation program ¹	\$ 491.7	\$ -	\$ 491.7	\$ 418.1	85.0%	\$ 27.1
NYA renovation program ²	438.2	-	438.2	4.0	0.9%	-
Eccles renovation program	622.6	-	622.6	27.0	4.3%	32.3
Post Eccles reconfiguration	23.3	-	23.3	-	0.0%	-
1951 Constitution Ave. NW acquisition and renovation program	755.2	-	755.2	76.3	10.1%	39.7
Sub-Total, Building Improvements	\$ 2,331.0	\$ -	\$ 2,331.0	\$ 525.4	22.5%	\$ 99.1
OCDO strategic initiatives	18.0	-	18.0	10.7	59.3%	0.8
Sub-Total, Data Strategy	\$ 18.0	\$ -	\$ 18.0	\$ 10.7	59.3%	\$ 0.8
Regulation, Analysis, and Modeling Platform (RAMP)	11.3	1.7	13.0	11.2	99.4%	1.7
Information portal (C&CA) ³	1.9	(1.9)	-	1.8	97.3%	-
FOMC system enhancements	2.6	-	2.6	0.7	27.9%	0.8
HR/financial management ERP operating system upgrade ³	1.6	(1.6)	-	1.6	99.9%	-
NextGen transformation ⁴	21.9	-	21.9	4.7	21.6%	9.3
Technology Optimization Program (TOP)	9.0	-	9.0	3.0	33.2%	3.5
Financial market infrastructure (FMI) participation database	2.1	-	2.1	1.6	79.8%	-
Payments Data Repository (PDR) ³	0.7	(0.7)	-	0.5	83.5%	-
ServiceNow enterprise solution	0.5	0.5	1.0	0.4	78.6%	0.6
Board statistics portfolio modernization	-	2.4	2.4	-	n.a.	1.1
Ethics program support ⁵	-	0.8	0.8	-	n.a.	0.4
Cybersecurity initiatives	-	2.2	2.2	-	n.a.	0.9
Data download program (DDP)	-	0.9	0.9	-	n.a.	0.5
Data management platform	-	0.8	0.8	-	n.a.	0.3
Sub-Total, Automation	\$ 51.4	\$ 5.1	\$ 56.5	\$ 25.7	49.9%	\$ 19.0
Grand Total	\$ 2,400.4	\$ 5.1	\$ 2,405.5	\$ 561.7	23.4%	\$ 118.9

Note: Components may not sum to totals and may not yield percentages shown because of rounding. Starting with the 2022 budget, the supervision data capabilities category has been consolidated under the automation projects category.

Acronyms: New York Avenue (NYA). Office of the Chief Data Officer (OCDO). Human Resources (HR). Federal Open Market Committee (FOMC). Enterprise Resource Planning (ERP).

1. Includes the Martin north garage and east fountain exterior improvements projects.
2. Includes 8th floor reconfiguration, restroom infrastructure, and mechanical upgrades projects.
3. These projects will be retired with the approval of the 2022 budget.
4. Includes the replacement of the Board's human capital, financial management, and procurement systems.
5. This project will be converted from a single-cycle capital project with the approval of the 2022 budget.