

BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

DIVISION OF RESERVE BANK OPERATIONS AND PAYMENT SYSTEMS

2021 Federal Reserve Bank Budgets Addendum

ACTION

In December, the Board approved the 2021 Federal Reserve Bank budgets, with the understanding that the U.S. Department of the Treasury’s Bureau of the Fiscal Service (Fiscal Service) had not yet provided its final authorization for certain expenditures to be made by the Federal Reserve as Treasury’s fiscal agent. Subsequently, Fiscal Service issued its authorization, and the director of the Division of Reserve Bank Operations and Payment Systems, acting under limited authority specifically delegated by the Board for this purpose, approved the Reserve Bank budgets reflecting the final authorization from Fiscal Service.¹

In its final authorization of the 2021 fiscal agent services, Fiscal Service identified expense reductions totaling \$20.2 million for three Districts and Federal Reserve Information Technology (FRIT).² Given the relative immateriality of the overall change, Reserve Banks were not required to make formal revisions to their 2021 budgets. Instead, the director of the Division of Reserve Bank Operations and Payment Systems, acting within the limited delegated authority provided by the Board in December, designated the affected programs as conditionally approved. For those conditionally approved initiatives, Reserve Banks may fund the programs up to the amount that has now been approved per Fiscal Service. Should Banks see cause to expend funds in excess of the approved amount, or otherwise change the scope of work from what has been authorized, Reserve Banks are required to seek approval from both Fiscal Service and the director of the Division of Reserve Bank Operations and Payment Systems.

The final approved budgets, net of the adjustments explained above, include the following:

¹ On December 10, 2020, the Board approved the 2021 Reserve Bank operating budgets totaling \$5,029.8 million, inclusive of \$657.8 million in Treasury services. The subsequent reductions identified by Fiscal Service constituted less than the 1 percent threshold for such adjustments explicitly specified in the Board’s approval, and consequently the final budgets were approved by the director of the Division of Reserve Bank Operations and Payment Systems under delegated authority.

² Reductions identified by Fiscal Service fall broadly into three categories—resources related to wholesale securities services, debt management, and payment modernization—and their associated infrastructure costs. The identified expense pools are housed within three Reserve Banks (New York, St. Louis, and Kansas City) as well as FRIT.

1. Total 2021 Reserve Bank operating expense budgets of \$5,029.8 million, which reflects an increase of \$281.6 million, or 5.9 percent, from the 2020 forecasted expenses. Total 2021 budgeted employment for the Reserve Banks, FRIT, and the OEB is 20,652 ANP, an increase of 552 ANP, or 2.7 percent, from 2020 forecasted staff levels. In consultation with the chair of the Committee on Federal Reserve Bank Affairs, the director of the Division of Reserve Bank Operations and Payment Systems designated \$40.1 million of expenses associated with investments for Transforming Tax Collection (T2C), Treasury Retail Investment Manager (TRIM), streamlining federal payment processing, the reductions identified by Fiscal Service, and OEB for conditional approval.³ The Reserve Banks are required to provide further information about these projects and obtain approval by the director of the Division of Reserve Bank Operations and Payment Systems prior to committing funds.

2. The 2021 Reserve Bank single and multiyear capital budgets were approved in three categories:
 - a) significant capital expenditures – multiyear approval for significant capital expenditures (typically expenditures exceeding \$1 million) totaling \$948.1 million for 2021 and the remaining term of these projects
 - b) other capital expenditures – single-year capital expenditures, by asset class, for less significant expenditures (less than \$1 million per project) totaling \$103.2 million for 2021
 - c) conditional approval – the chair of the Committee on Federal Reserve Bank Affairs designated \$114.6 million in 2021 and \$660.0 million for 2021 and the remaining term of these projects for conditional approval.⁴ The Reserve Banks are required to provide further information about these projects and obtain approval by the director of the Division of Reserve Bank Operations and Payment Systems prior to committing funds.

The approval of these adjustments, and expectations regarding process should further changes to the work undertaken on behalf of the U.S. Department of the Treasury prove necessary, have been communicated to the Reserve Banks.

³ The T2C program will develop and implement a modern tax collection system for electronically collecting federal tax payments. TRIM is a multiyear development program to introduce new business functionality and infrastructure for the retail Treasury program.

⁴ Generally, capital expenditures that are designated for conditional approval include certain building projects, District expenditures that substantially affect or influence future System direction or the manner in which significant services are performed, expenditures that may be inconsistent with System direction or vary from previously negotiated purchasing agreements, and local expenditures that duplicate national efforts.

BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

DIVISION OF RESERVE BANK OPERATIONS AND PAYMENT SYSTEMS

2021 Federal Reserve Bank Budgets

ACTION

On December 10, 2020, the Board approved the 2021 Reserve Bank operating budgets totaling \$5,029.8 million, an increase of \$281.6 million, or 5.9 percent, from the 2020 forecasted expenses.⁵ The chair of the Committee on Federal Reserve Bank Affairs designated two components of the operating expense budgets for conditional approval:

- a) Because Fiscal Service had not fully determined the level of funding for fiscal services provided by the Federal Reserve Banks in time for a sufficient review, the portion of the 2021 Banks' budgets associated with services to the Treasury was not considered final.⁶ Expenses associated with services provided to the Treasury (\$657.8 million) are therefore subject to additional review after the finalization of the relevant authorization from Fiscal Service. Board approval of Reserve Bank resources for services provided to the Treasury are necessary for material revisions, which are those requiring an adjustment of one percent or more to the 2021 Reserve Bank operating budgets of \$5,029.8 million. For revisions that are not material, which are those requiring an adjustment of less than one percent of the 2021 Reserve Bank operating budgets of \$5,029.8 million, the Board delegated the approval of the resources for services provided to the Treasury to the director of the Division of Reserve Bank Operations and Payment Systems. A similar approach to similar circumstances was taken for the 2019 and 2020 budgets.
- b) Expenses associated with investments in T2C (\$9.3 million), TRIM (\$10.4 million), streamlining federal payment processing (\$9.4 million), and the OEB's resourcing plan (\$0.1 million) require additional review and approval by the director of the Division of Reserve Bank Operations and Payment Systems.

⁵ These expenses include those budgeted by Federal Reserve Information Technology and the Office of Employee Benefits that are chargeable to the Reserve Banks. Expenses exclude assessments for the Board of Governors operating expenses, pension costs, the cost of currency, and the Consumer Financial Protection Bureau. The forecast is based on actual expenses incurred through September 2020 and a forecast for the remaining months of the year.

⁶ Fiscal Service provided its final guidance on December 22, 2020. However, the discussion section below does not incorporate this guidance, as this guidance was received after the Board's action. The accompanying addendum incorporates Fiscal Service's final guidance.

The Board also approved the Reserve Bank, FRIT, and the OEB single and multiyear capital budgets in three categories.⁷

- a) Significant capital expenditures – multiyear approval for significant capital expenditures (typically expenditures exceeding \$1 million) totaling \$866.9 million for 2021 and the remaining term of these projects;
- b) other capital expenditures – single-year capital expenditures, by asset class, for less significant expenditures (less than \$1 million per project) totaling \$102.4 million for 2021; and
- c) conditional approval –
 - i. The chair of the Committee on Federal Reserve Bank Affairs designated \$105.1 million in 2021 and \$639.7 million for 2021 and the remaining term of these projects for conditional approval. The Reserve Banks are required to provide further information about these projects and obtain approval from the director of the Division of Reserve Bank Operations and Payment Systems prior to committing funds.
 - ii. The chair of the Committee on Federal Reserve Bank Affairs designated a total of \$47.1 million in Treasury-related capital investments for conditional approval in 2021, pending authorization from Fiscal Service. These investments would be subject to additional review and approval by the director of the Division of Reserve Bank Operations and Payment Systems.

DISCUSSION

The Reserve Banks have prepared annual budgets for 2021 as part of their efforts to demonstrate appropriate stewardship and accountability. The budgets are formulated to ensure alignment with each Reserve Bank’s and the System’s strategic priorities, including

- contributing to the formulation of monetary policy and enhancing monetary policy implementation to become more effective, flexible, and resilient
- promoting financial stability through effective monitoring, analysis, and policy development
- promoting safety and soundness of financial institutions through effective supervision
- leading efforts to enhance the security, resiliency, functionality, and efficiency of services provided to financial institutions and the public

The Conference of Presidents, operating through its Committee on Spending Stewardship, defines, in close consultation with the Board’s Committee on Federal Reserve Bank Affairs, key strategic objectives for the System. Considering longer-term environmental trends and historical

⁷ See tables in the attachment for expense and capital amounts by Reserve Bank.

growth rates of expense, these governance bodies articulate an aggregate System-level growth expectation for a multiyear period. The Reserve Banks develop budgets that reflect this direction, importantly through framing and making appropriate tradeoffs. These budgets are reviewed by each Reserve Bank’s board of directors and senior leadership, the latter of which reviews the budgets for alignment with Reserve Bank and System priorities. Board staff analyzes these budget submissions both individually and in the aggregate and then provides recommendations to the Board’s Committee on Federal Reserve Bank Affairs for review and final action.

TOTAL EXPENSE AND EMPLOYMENT SUMMARY

2021 Operating Expenses, Net of Revenue and Reimbursements

The 2021 operating budgets of the Reserve Banks, inclusive of Treasury services, total \$5,029.8 million, which is \$281.6 million, or 5.9	Change in Net Expenses (dollars in millions)				
	2020	2020	2021	Percent Change	
	Budget	Forecast	Budget	20F - 20B	21B - 20F
Total Expense	\$4,771.2	\$4,748.2	\$5,029.8	-0.5%	5.9%
Less:					
Priced Services Revenue	443.8	446.0	439.1	0.5%	-1.6%
Reimbursable Claims	722.5	682.3	710.4	-5.6%	4.1%
Net Expenses	\$3,604.9	\$3,619.9	\$3,880.4	0.4%	7.2%

percent, higher than the 2020 forecast. About a quarter of Reserve Bank expenses in the 2021 budget are offset by either priced services revenue (8.7 percent) or reimbursable claims for services provided to the Treasury and fiscal principals (14.1 percent).⁸ Budgeted 2021 operating expenses, net of revenue and reimbursements, are expected to increase \$259.7 million, or 7.2 percent, from 2020 forecasted expenses.⁹ Budgeted 2021 priced services revenue is 1.6 percent lower than the 2020 forecasted level, reflecting a continual decline in check volume, offset by

⁸ The Federal Reserve provides services to the U.S. government pursuant to the Federal Reserve Act, which stipulates that, when required by the Secretary of the Treasury, Reserve Banks will act as fiscal agents and depositories of the United States. Direct and indirect expenses associated with the services provided to the Treasury are reimbursable. Reimbursable claims include the expenses of fiscal agency and depository services provided to the U.S. Treasury, other government agencies, and other fiscal principals. Reimbursable claims are slightly higher than Treasury service expenses shown in the “Reserve Bank Expenses and Staffing” table because the reimbursable claims also include expenses associated with the government’s use of the Reserve Banks’ check, ACH, Fedwire Funds, and Fedwire Securities services; these expenses are included in the “Change in Net Expenses” table.

⁹ Reimbursable claims exclude annual assessments for the supervision of large financial companies pursuant to Regulation TT, which are not recognized as revenue or used to fund System expenses. A final rule was approved in November 2020 to modify the supervision and regulation assessment of fees. This rule adjusts the amount charged to assessed companies with total consolidated assets between \$100 billion and \$250 billion to reflect Economic Growth, Regulatory Relief, and Consumer Protection Act related changes in supervisory and regulatory responsibilities. The implementation of these modifications begins in 2021 and as a result, we are unable to provide an estimate for the 2021 assessment at this time.

steadily increasing ACH volume.¹⁰ Reimbursable claims are expected to increase 4.1 percent in 2021, reflecting increased activity for new or expanded Treasury services, pending approval by Fiscal Service.

2020 Budget Performance

The total 2020 operating expense forecast for the Reserve Banks is \$4,748.2 million, which is \$23.0 million, or 0.5 percent, less than the approved 2020 budget of \$4,771.2 million. The forecasted average number of personnel (ANP) is 20,099, which is 201, or 1.0 percent, over the 2020 budget. This increase is largely attributable to standing up the credit and liquidity facilities created to provide liquidity to

Significant Staffing (ANP) Changes 2020 Forecast to 2020 Budget	
2020 Budget	19,898
Credit and Liquidity Facilities	112
Information Technology	74
FedNow	45
Support and Overhead	41
Cash Services	19
Other	(6)
Treasury Services	(29)
Supervision and Regulation	(54)
2020 Forecast	20,099

various sectors of the economy and information technology resources to support the larger telework population in response to COVID-19. Additional resources include support for the Federal Reserve System’s commitment to modernize the nation’s payment system and establish a safe and efficient foundation for the future (FedNow).¹¹ The forecasted 2020 capital spending for the Reserve Banks, Federal Reserve Information Technology (FRIT), and Office of Employee Benefits (OEB) is less than budget by \$122.0 million, or 23.0 percent, predominantly driven by plan changes because of COVID-19, including timing and scope for building-related initiatives.

2021 Budgeted Operating Expenses

The 2021 operating budgets of the Reserve Banks, excluding services to the Treasury, total \$4,372.1 million, which is \$252.9 million, or 6.1 percent, higher than the 2020 forecast. Investments in fee-based services reflect increases for FedNow. Growth in monetary policy and public programs are for increased resources dedicated to regional economic research and

¹⁰ The Federal Reserve Board on November 10, 2020, announced the approval of fee schedules, effective January 4, 2021, for payment services the Federal Reserve Banks provide to depository institutions (priced services). The Reserve Banks will maintain the current schedule of prices for priced services in 2021, with the exception of a modification to the Check Services participation fee. This approach recognizes the uncertainties created by the COVID-19 pandemic and offers price stability for customers facing unique challenges in 2021.

¹¹ The Federal Reserve is developing a new round-the-clock real-time payment and settlement service, called the FedNowSM Service, to support faster payments in the United States.

community engagement, including studies on inflation and low- and moderate-income communities. Supervision growth has moderated due to more-efficient oversight focusing on areas of risk and allocating resources to the highest priorities. Additionally, increases in cash expenses are driven by the second phase of the next-generation currency-processing program (NextGen).¹²

The 2021 operating budgets of the Reserve Banks, including services to the Treasury, total \$5,029.8 million, which is \$281.6 million, or 5.9 percent, higher than the 2020 forecast. Budgeted expenses for services to the Treasury total \$657.8 million, an increase of \$28.7 million, or 4.6 percent, from the 2020 forecast, primarily for ongoing investments to Treasury infrastructure platforms, including the Treasury Web Applications Infrastructure (TWA) platform and a secure cloud platform for Treasury applications. The chair of the Committee on Federal Reserve Bank Affairs approved the 2021 budgets contingent on final approval of funding levels from Fiscal Service.¹³

The chair of the Committee on Federal Reserve Bank Affairs also designated a portion of the 2021 operating expense budgets (\$29.3 million) associated with investments for T2C, TRIM, streamlining federal payment processing, and OEB for conditional approval. Programs with this designation require additional review and approval by the director of the Division of Reserve Bank Operations and Payment Systems.

¹² The Cash Product Office has developed a strategy to transition the current fleet of high-speed currency processing machines and the sensor suite from the Banknote Processing System platform to the future next-generation (NextGen) processing infrastructure.

¹³ Board approval of Reserve Bank resources for services provided to the Treasury would be requested for material revisions, which represent an adjustment of one percent or more to the 2021 Reserve Bank operating budgets of \$5,029.8 million. For revisions that are not material, which represent an adjustment of less than one percent of the 2021 Reserve Bank operating budgets of \$5,029.8 million, the Board delegated the approval of the resources for services provided to the Treasury to the director of the Division of Reserve Bank Operations and Payment Systems.

2021 Personnel Expenses and Staffing

Total 2021 budgeted employment for the Reserve Banks, FRIT, and OEB is 20,652 ANP, an increase of 552 ANP, or 2.7 percent, from 2020 forecasted staff levels. Primary growth drivers for ANP include FedNow and Support and Overhead (S&OH). About half of the increase in S&OH is attributable to a realignment of resources to enable national efforts in procurement, finance, and human resource management. The centralization of support functions to realize economies of scale accounts for increases in All Other S&OH. Additions to the

Significant Staffing (ANP) Changes 2021 Budget to 2020 Forecast	
2020 Forecast	20,099
FedNow	167
Support and Overhead (S&OH)	160
<i>Finance, Procurement and HR</i>	87
<i>All Other S&OH</i>	73
Cash	63
Public Programs	38
Other	34
Customer Relations Support Office	33
Monetary Policy	29
Information Technology	5
2021 Budget (before Treasury Svcs)	20,628
Treasury Services	24
2021 Budget	20,652

Cash function reflect support of ongoing currency operations and the NextGen program. Growth in the Customer Relations Support Office results from the need to enhance product offerings and ensure the security and resiliency of FedLine.¹⁴ The increases in Monetary Policy and Public Programs supports community development initiatives and regional economic research and outreach initiatives.

Reserve Bank officer and staff salaries and other personnel expenses for 2020 total \$3,572.3 million, an increase of \$228.1 million, or 6.4 percent, from 2020 forecasted expenses. The increase reflects the expenses associated with additional staff, salary administration (that is, merit increases, equity adjustments, and promotions), variable pay, and retirement and other benefit costs.

¹⁴ Enhancements to FedLine reflect a multiyear transformational effort focused on evolving the FedLine network, authentication, and hosting infrastructure to meet customer, industry, and FRS needs.

2021 Capital Budgets

The 2021 capital budgets submitted by the Reserve Banks, FRIT, and OEB total \$598.9 million. The 2021 capital budget has increased \$189.9 million, or 46.4 percent, from the 2020 forecasted levels of \$408.9 million, largely reflecting ongoing multiyear building and IT strategic initiatives. Initiatives in the 2021 capital budget support major workspace renovations, address aging building infrastructure in several Reserve Banks, improve IT infrastructure, and provide application upgrades and releases. Additionally, because several programs experienced pandemic related delays in 2020, Reserve Banks’ 2021 capital investments account for “COVID catch-up” work (that is, planned 2020 projects that were delayed or deferred to 2021 as a result of the pandemic). The chair of the Committee on Federal Reserve Bank Affairs designated a portion of the projects comprising the 2021 capital budgets (\$152.2 million) for conditional approval, requiring additional review and approval by the director of the Division of Reserve Bank Operations and Payment Systems. The remainder of the budgets were approved in two categories: (1) approval for significant capital expenditures for 2021 and the remaining term of these projects (\$866.9 million) and (2) single-year approval for all other capital expenditures by asset class (\$102.4 million).

	2021 Capital	2022 and Beyond Capital	Total
Capital Expenditures Designated for Conditional Approval¹	\$152.2	\$589.8	\$742.0
Projects previously designated	11.6	21.0	32.5
New conditionally approved projects	93.5	513.6	607.1
Treasury Initiatives ²	47.1	55.2	102.3
Significant Capital Expenditures	344.3	522.7	866.9
Other Capital Expenditures	102.4		102.4
Art	0.2		0.2
Building	20.8		20.8
Equipment	55.6		55.6
Furniture, Furnishings, & Fixtures	4.4		4.4
Land and Other Real Estate	1.3		1.3
Leasehold Improvements	0.2		0.2
Software	19.9		19.9
Total Capital Budget	\$598.9	\$1,112.5	\$1,711.3

¹ Previously designated projects may include amounts that have already been approved by the Director of RBOPS that are not reflected on this chart.

² Pending approval by the Bureau of the Fiscal Service.

Capital expenditures designated for conditional approval

The chair of the Committee on Federal Reserve Bank Affairs designated for conditional approval budgeted 2021 capital expenditures of \$152.2 million and total multiyear budgeted expenditures of \$742.0 million for 2021 and future years. The expenditures designated for conditional approval include large-scale building projects to renovate office space and update building infrastructure. Technology projects include support for services performed on behalf of Treasury, investments for FedNow, and NextGen. In addition, the chair of the Committee on Federal Reserve Bank Affairs designated for conditional approval the expense portion of T2C,

TRIM, investments for streamlining federal payment processing, and OEB resourcing as well as all Treasury-related investments, pending approval from Fiscal Service.

Significant capital expenditures

Significant capital expenditures (typically expenditures exceeding \$1 million) that have not been designated for conditional approval include total multiyear budgeted expenditures of \$866.9 million for 2021 and future years, of which the single-year 2021 budgeted expenditures are \$344.3 million. This category includes building expenditures for office space renovations, mechanical and electrical infrastructure upgrades, building automation, and security enhancements. IT projects include ongoing IT infrastructure investments, initiatives that enable better access to data and enhance cybersecurity and cyberresiliency, and applications to support fee-based services, supervision, cash, and open market operations.

Other capital expenditures

The 2021 capital budgets include \$102.4 million for other capital expenditures that are individually less than \$1 million per project, such as building maintenance expenditures, scheduled software and equipment upgrades, and equipment and furniture replacements.

Five-Year Trend in Reserve Bank Expenses

Total expenses for the Reserve Banks have grown an average of 4.5 percent annually from 2016 actual through 2021 budget.

Total Expenses of the Federal Reserve Banks, by Functional Area							
(dollars in millions)							
	2016 Actual	2017 Actual	2018 Actual	2019 Actual	2020 Forecast	2021 Budget	CAGR* 2016-2021
Central Bank Service	\$3,053.9	\$3,186.3	\$3,344.3	\$3,463.0	\$3,599.0	\$3,781.2	4.4%
Monetary and Economic Policy	655.1	693.4	720.4	751.9	799.3	845.4	5.2%
Services to Financial Institutions and the Public	1,088.8	1,127.0	1,199.6	1,238.1	1,338.0	1,384.6	4.9%
Supervision	1,309.9	1,366.0	1,424.2	1,473.0	1,461.6	1,551.2	3.4%
Services to U.S. Treasury and Gov't Agencies	569.9	597.6	608.3	617.1	629.0	657.8	2.9%
Fee-Based Services to Financial Institutions	408.3	425.0	441.5	463.0	520.2	590.9	7.7%
Total	\$4,032.1	\$4,209.0	\$4,394.1	\$4,543.1	\$4,748.2	\$5,029.8	4.5%

*Compound Annual Growth Rate

Trends in Central Bank Service Expense

Expenses for central bank functions, which comprise monetary and economic policy, open market operations, services to financial institutions and the public, and supervision, have grown an average of 4.4 percent

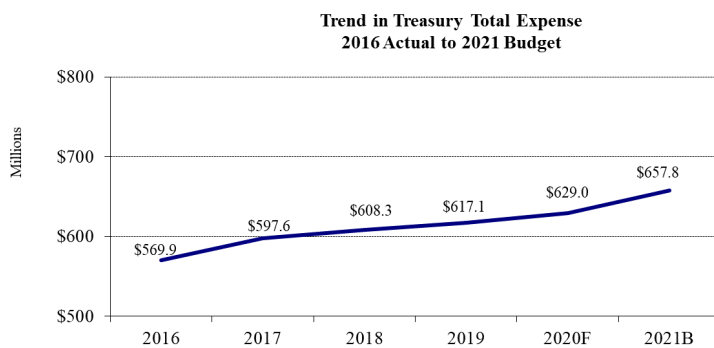
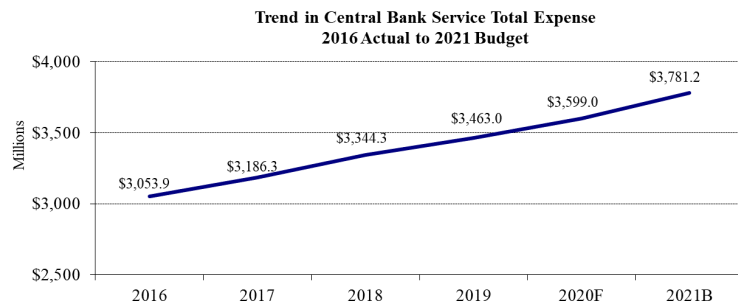
annually over the past five years. Monetary and economic policy expense has experienced the largest rate of growth, with an average of 5.2 percent annual expense growth over the past five years and an increase of 93 ANP since 2016. This growth is largely driven by increases at the Federal Reserve Bank of New York, reflecting a focus on improving operational resiliency and technology enhancements to better support the management, analysis, and execution of open market operations. Additional growth in monetary policy expenses reflects increased resources dedicated to regional economic research.

Expenses in services to financial institutions and the public have increased an average of 4.9 percent annually, reflecting ongoing currency operations, the onset of funding for the NextGen currency-processing program, and the formation of the credit and liquidity facilities.

Average growth in supervision expenses has been kept to 3.4 percent annually by focusing on efficiencies and making tradeoff decisions that direct funding to strategic priorities.

Trends in Treasury Services Expense

Treasury services expenses have increased an average of 2.9 percent annually from 2016 to 2021. Expenses have increased to meet the Treasury's evolving and expanding needs, which are largely attributable to the modernization of core systems and the addition of new Treasury applications. A portion of this growth has been offset by



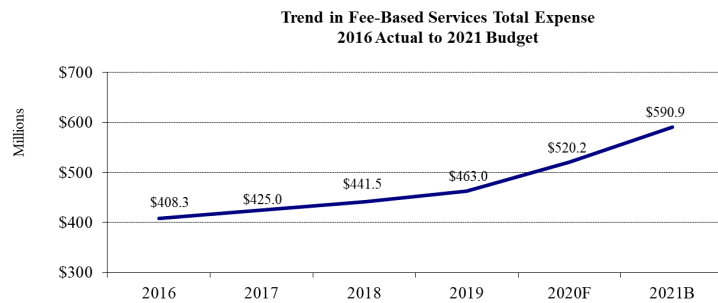
Reserve Bank efficiency initiatives and the consolidation of various Fiscal Agent support functions.

Trends in Fee-Based Services Expense

Fee-based services expenses have increased an average of 7.7 percent annually since 2016. Expense increases are primarily for investments in the payment infrastructure modernization efforts, including

the FedNow initiative and investments associated with multiyear technology initiatives to modernize processing platforms for Fedwire and ACH.¹⁵ These

investments are expected to enhance efficiency, the overall quality of operations, and the Reserve Banks' ability to offer additional services to depository institutions. Partially offsetting these investments are declining check services expenses, which have fallen an average of 3.7 percent annually since 2016 because of the decrease of paper check volume and the efficiencies associated with electronic check processing.



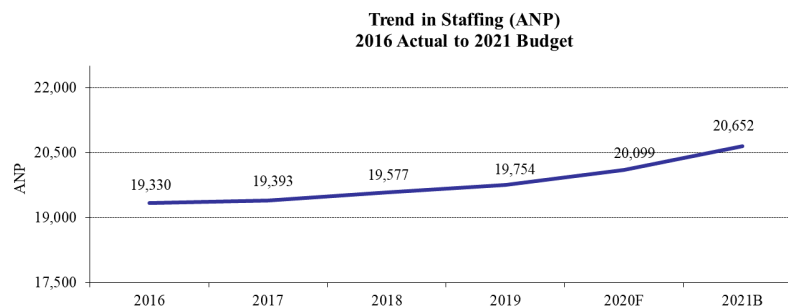
Trends in Staffing

Total staffing levels have increased an average of 1.3 percent annually since 2016. The primary driver is in fee-based services, at an average of 26.7 percent annually, where growth is attributable to staffing

additions for FedNow. Growth in services to financial institutions and the public is primarily for the addition of resources in

support of the credit and

liquidity facilities, which were created in response to the COVID-19 pandemic. Monetary policy has grown modestly to support financial stability monitoring, operational activities, and regional

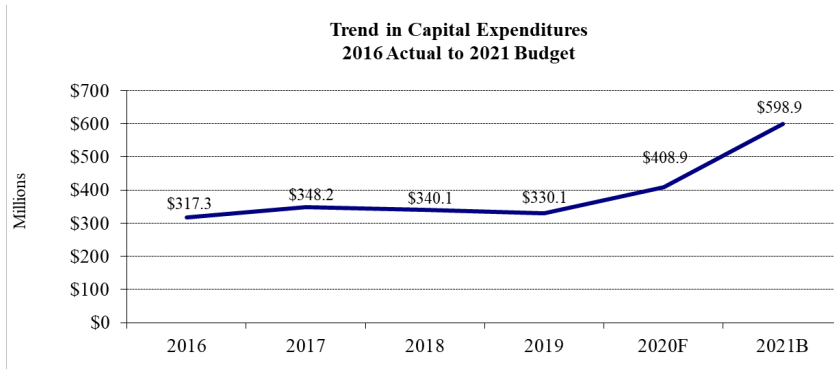


¹⁵ The ACH Modernization program is a multi-year technology initiative designed to replace the Federal Reserve's current core ACH processing system with a new, modern technology solution.

economic research. Staffing in the Treasury function supports operations of ongoing programs. These increases are offset, in part, by relatively stable staffing in the supervision function as increases to support strategic initiatives are counterbalanced by operational efficiencies and reduced regulatory burden.

Trends in Capital

Total capital spending has increased at an average of 13.5 percent annually since 2016 and has included funding for multiyear building projects and



large-scale automation projects. These initiatives include development of FedNow, ACH Modernization, NextGen and other cash modernization initiatives, Fedwire initiatives, and Treasury applications. In 2021, major building renovation and infrastructure projects in several Reserve Banks will advance, while concurrently the Federal Reserve System will continue to invest in automation initiatives and IT infrastructure.

Statistical Supplement

Table A	Total Expenses of the Federal Reserve Banks, by District
Table B	Total Employment of the Federal Reserve Banks, by District
Table C	Total Employment of the Federal Reserve Banks, by Functional Area
Table D	Budgeted Changes to the Cash Compensation Components of the Federal Reserve Banks, Officers and Staff, by District
Table E	Capital Outlays of the Federal Reserve Banks, by District

Notes: In the following tables, Reserve Bank expenses include those budgeted by FRIT and OEB that are chargeable to the Reserve Banks.

TABLE A: TOTAL EXPENSES OF THE FEDERAL RESERVE BANKS
by District, 2020 and 2021
(Dollars in Thousands)

District	2020 Budget	2020 Forecast	2021 Budget	Variance		
				20F to 20B	21B to 20F	21B to 20B
Boston	239,629	258,464	312,205	7.9%	20.8%	30.3%
New York	1,076,874	1,078,102	1,122,683	0.1%	4.1%	4.3%
Philadelphia	199,364	197,097	210,731	-1.1%	6.9%	5.7%
Cleveland	230,228	224,663	236,370	-2.4%	5.2%	2.7%
Richmond	517,673	528,289	546,151	2.1%	3.4%	5.5%
Atlanta	414,136	405,830	425,140	-2.0%	4.8%	2.7%
Chicago	423,694	413,939	453,469	-2.3%	9.5%	7.0%
St. Louis	437,324	416,389	446,800	-4.8%	7.3%	2.2%
Minneapolis	183,092	184,852	193,208	1.0%	4.5%	5.5%
Kansas City	364,429	360,371	381,879	-1.1%	6.0%	4.8%
Dallas	243,322	245,585	258,180	0.9%	5.1%	6.1%
San Francisco	441,444	434,611	443,007	-1.5%	1.9%	0.4%
Total	4,771,209	4,748,194	5,029,824	-0.5%	5.9%	5.4%

TABLE B: TOTAL EMPLOYMENT OF THE FEDERAL RESERVE BANKS
by District, 2020 and 2021
(Average Number of Personnel)

District	2020 Budget	2020 Forecast	2021 Budget	Variance		
				20F to 20B	21B to 20F	21B to 20B
Boston	1,055	1,035	1,254	-20	219	199
New York	3,223	3,204	3,218	-19	14	-5
Philadelphia	864	882	881	17	-1	17
Cleveland	1,030	1,029	1,052	-1	23	22
Richmond	1,460	1,502	1,514	42	12	54
Atlanta	1,730	1,733	1,734	3	0	3
Chicago	1,606	1,617	1,676	11	58	69
St. Louis	1,415	1,441	1,458	26	17	43
Minneapolis	1,054	1,069	1,088	14	19	34
Kansas City	2,064	2,087	2,096	23	9	32
Dallas	1,278	1,290	1,323	12	33	45
San Francisco	1,762	1,790	1,826	29	36	65
Subtotal	18,542	18,680	19,120	138	440	578
FRIT	1,295	1,358	1,465	63	107	170
OEB	61	62	67	0	5	5
Total	19,898	20,099	20,652	201	552	754

TABLE C: TOTAL EMPLOYMENT OF THE FEDERAL RESERVE BANKS¹
by Functional Area
(Average Number of Personnel)

	2016	2017	2018	2019	2020F	2021B	CAGR
							2016-2021
Monetary and Economic Policy	1,284	1,296	1,287	1,324	1,359	1,377	1.4%
Services to U.S. Treasury and Gov't Agencies	1,161	1,178	1,238	1,267	1,227	1,251	1.5%
Services to Financial Institutions and the Public	2,568	2,550	2,600	2,645	2,798	2,896	2.4%
Supervision	4,140	4,143	4,124	4,117	4,026	4,086	-0.3%
Fee-Based Services to Financial Institutions	720	753	761	740	803	959	5.9%
Local Support and Overhead	6,820	6,822	6,896	6,984	7,117	7,237	1.2%
Nationally Provided Support	1,374	1,349	662	680	730	782	-10.7%
Centralized Service Providers	1,262	1,302	2,010	1,997	2,039	2,064	10.3%
Total	19,330	19,393	19,577	19,754	20,099	20,652	1.3%

¹Includes ANP at FRIT and OEB.

Nationally Provided Support: Support services performed on behalf of multiple Districts under a regionalized or centralized function. In this table, select nationally provided support ANP have been included in the associated functional areas.

Centralized Service Providers: Support services provided by FRIT and OEB. National IT Operations (NITOs) are IT activities performed on behalf of the System under a regionalized or centralized function. Beginning in 2018, NITO ANP are recategorized as Centralized Service Providers to align with the corresponding cost accounting policy change.

**TABLE D: BUDGETED CHANGES TO CASH COMPENSATION PROGRAMS OF THE FEDERAL RESERVE BANKS
Officers and Staff by District, 2021
(Dollars in Thousands)**

District	Total 12/31/20 Salary Liability (a)	Additions to Salary Base				Incremental Variable Pay (e)	Total	
		Merit (b)	Equity Adjustments (c)	Promotions and Reclasses (d)	Percentage Increase to Total 12/31/20 Salary Liability (b + c + d) / (a)		Dollars (b + c + d + e)	Percentage Increase to Total 12/31/20 Salary Liability (b + c + d + e) / (a)
Boston	153,864	4,616	769	1,539	4.5%	1,940	8,863	5.8%
New York	506,763	15,203	1,478	4,345	4.1%	4,167	25,193	5.0%
Philadelphia	106,104	3,182	530	1,061	4.5%	637	5,409	5.1%
Cleveland	118,533	3,556	296	1,482	4.5%	722	6,056	5.1%
Richmond	165,396	5,020	661	1,300	4.2%	1,227	8,209	5.0%
Atlanta	194,050	6,113	210	2,409	4.5%	918	9,651	5.0%
Chicago	210,835	6,325	1,054	2,108	4.5%	1,791	11,278	5.3%
St. Louis	164,976	4,949	825	1,650	4.5%	667	8,090	4.9%
Minneapolis	112,907	3,387	247	1,129	4.2%	626	5,389	4.8%
Kansas City	196,412	5,892	982	1,964	4.5%	943	9,782	5.0%
Dallas	136,831	4,105	421	1,535	4.4%	942	7,003	5.1%
San Francisco	233,455	6,869	1,191	2,358	4.5%	1,277	11,695	5.0%
FRIT	208,889	6,499	834	1,986	4.5%	1,960	11,279	5.4%
OEB	11,193	336	56	112	4.5%	150	653	5.8%
Total	2,520,209	76,052	9,556	24,977	4.4%	17,966	128,551	5.1%

The table above shows the cash compensation components that add to base salary (merit, equity, and promotion) and the 2021 incremental increase in variable pay expense compared to those estimated for 2020.

December 31, 2020 Salary Liability: the annualized salary expense based on the salaries in effect on December 31.

Merit: the amount of 2021 budgeted salary expense that reflects salary increases for individuals based on performance.

Equity Adjustments: the amount of 2021 budgeted salary expense to bring individual salaries to the minimum of a salary range or to better align salaries based on internal or external compensation pressures.

Promotions: the amount of 2021 budgeted salary expense that reflects salary increases for individuals as a result of promotions resulting from a significant increase in job responsibilities.

Variable Pay: The change in 2021 budgeted incentive payments (payment for the achievement of pre-determined goals) and cash awards (awards in recognition of exceptional achievements) compared to the 2020 estimate.

TABLE E: CAPITAL OUTLAYS OF THE FEDERAL RESERVE BANKS
by District, 2020 and 2021
(Dollars in Thousands)

District	2020 Budget	2020 Forecast	2021 Budget	Variance		
				20F to 20B	21B to 20F	21B to 20B
Boston	21,680	17,630	85,271	-18.7%	383.7%	293.3%
New York	87,570	50,589	78,845	-42.2%	55.9%	-10.0%
Philadelphia	75,346	52,756	54,814	-30.0%	3.9%	-27.3%
Cleveland	25,852	24,737	28,040	-4.3%	13.4%	8.5%
Richmond	20,788	8,859	17,744	-57.4%	100.3%	-14.6%
Atlanta	26,861	18,063	34,216	-32.8%	89.4%	27.4%
Chicago	21,411	15,620	32,561	-27.0%	108.5%	52.1%
St. Louis	15,201	6,615	19,352	-56.5%	192.5%	27.3%
Minneapolis	12,585	12,530	25,594	-0.4%	104.3%	103.4%
Kansas City	44,648	43,022	35,891	-3.6%	-16.6%	-19.6%
Dallas	27,033	13,827	26,806	-48.9%	93.9%	-0.8%
San Francisco	63,772	67,101	82,787	5.2%	23.4%	29.8%
Subtotal	442,746	331,350	521,920	-25.2%	57.5%	17.9%
FRIT	84,799	73,199	76,766	-13.7%	4.9%	-9.5%
OEB	3,392	4,400	200	29.7%	-95.5%	-94.1%
Total	530,936	408,948	598,886	-23.0%	46.4%	12.8%