BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

DIVISION OF RESERVE BANK OPERATIONS AND PAYMENT SYSTEMS

2019 Federal Reserve Bank Budgets Addendum

ACTION

The director of the Division of Reserve Bank Operations and Payment Systems, acting under limited authority specifically delegated by the Board for this purpose, has approved the revised Reserve Bank budgets to reflect the final authorization from the U.S. Department of the Treasury's Bureau of the Fiscal Service (Fiscal Service). Fiscal Service's final authorization of the 2019 fiscal agent services requested of the Reserve Banks required adjustments to the approved budgets for three Districts and Federal Reserve Information Technology (FRIT) to ensure that Reserve Banks manage to the approved funding levels.

The revised 2019 Reserve Bank budgets reflect aggregate reductions of \$10.7 million and \$1.8 million for the operating expense and capital budgets, respectively.³ The tables attached show the revised operating expense and capital budgets for each Reserve Bank, FRIT, and the Office of Employee Benefits (OEB).

The final approved budgets include the following:

1. Total revised 2019 Reserve Bank operating expense budgets of \$4,573.8 million, which reflects an increase of \$151.1 million, or 3.4 percent, from the 2018 forecasted expenses. Total 2019 budgeted employment for the Reserve Banks, FRIT, and the OEB is 19,856 ANP, an increase of 291 ANP, or

¹On December 11, 2018, the Board approved Reserve Bank budgets totaling \$4,584.4 million, inclusive of \$668.5 million in Treasury services. The reduction to the budget of \$10.7 million was less than the 1 percent threshold specified in the Board's earlier approval and, as a result, the revised budgets were approved by the director of the Division of Reserve Bank Operations and Payment Systems under delegated authority.

²Board staff requested that the Federal Reserve Banks of Cleveland, New York, and St. Louis as well as FRIT update their 2019 budgets to align with the authorized funding from Fiscal Service. Fiscal Service final authorization resulted in a reduction to the scope of work related to cloud development (Federal Reserve Banks of Cleveland and St. Louis and FRIT); however, it resulted in an increase to the Federal Reserve Bank of New York's funding for the Technology Improvements to Treasury Auction (TITAN) initiative.

³The updated 2019 capital budget includes reductions in the Federal Reserve Bank of Cleveland and FRIT primarily related to investments for cloud computing, partly offset by an increase in the Federal Reserve Bank of New York for the TITAN initiative.

- 1.5 percent from 2018 forecasted staff levels.
- 2. The 2019 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 \$566.6 million for 2019 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 \$97.2 million for 2019; and
 - c) conditional approval the chair of the Committee on Federal Reserve Bank Affairs designated \$138.4 million in 2019 and \$395.6 million for 2019 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.

Attachments – 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 components may not sum to totals and may not yield percentages shown because of rounding.

⁴Generally, 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.

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TOTAL EXPENSES OF THE FEDERAL RESERVE BANKS

by District, 2018 and 2019 (Dollars in Thousands)

	2018	2018	2019		Variance	
District	Budget	Forecast	Budget	18F to 18B	19B to 18F	19B to 18B
Boston	232,955	227,070	231,572	-2.5%	2.0%	-0.6%
New York	1,006,671	1,012,482	1,043,452	0.6%	3.1%	3.7%
Philadelphia	191,787	192,453	194,838	0.3%	1.2%	1.6%
Cleveland	203,294	201,340	209,374	-1.0%	4.0%	3.0%
Richmond	479,818	476,988	503,568	-0.6%	5.6%	4.9%
Atlanta	420,306	413,816	415,457	-1.5%	0.4%	-1.2%
Chicago	397,752	385,325	396,116	-3.1%	2.8%	-0.4%
St. Louis	412,040	409,081	431,162	-0.7%	5.4%	4.6%
Minneapolis	173,998	172,955	179,959	-0.6%	4.0%	3.4%
Kansas City	307,319	312,317	332,707	1.6%	6.5%	8.3%
Dallas	238,573	232,921	239,079	-2.4%	2.6%	0.2%
San Francisco	386,817	385,861	396,470	-0.2%	2.7%	2.5%
Total	4,451,329	4,422,609	4,573,752	-0.6%	3.4%	2.8%

TOTAL EMPLOYMENT OF THE FEDERAL RESERVE BANKS

by District, 2018 and 2019 (Average Number of Personnel)

	2018	2018	2019	Variance		
District	Budget	Forecast	Budget	18F to 18B	19B to 18F	19B to 18B
Boston	1,086	1,054	1,037	-32	-17	-49
New York	3,277	3,179	3,232	-99	54	-45
Philadelphia	876	883	859	7	-24	-17
Cleveland	999	985	988	-14	3	-11
Richmond	1,498	1,458	1,481	-40	24	-17
Atlanta	1,774	1,759	1,737	-16	-22	-37
Chicago	1,605	1,552	1,599	-53	47	-7
St. Louis	1,442	1,394	1,435	-48	41	-7
Minneapolis	1,030	1,021	1,060	-10	39	30
Kansas City	1,910	1,951	2,006	42	54	96
Dallas	1,320	1,279	1,278	-42	-1	-42
San Francisco	1,732	1,711	1,765	-22	54	32
Subtotal	18,550	18,224	18,477	-327	253	-74
FRIT	1,270	1,287	1,321	17	34	51
OEB	58	55	59	-2	4	1
Total	19,878	19,565	19,856	-312	291	-21

Table C

TOTAL EMPLOYMENT OF THE FEDERAL RESERVE BANKS¹

by Functional Area (Average Number of Personnel)

	2014	2015	2016	2017	2018F	2019B	CAGR 2014-2019
Monetary and Economic Policy	1,247	1,262	1,284	1,296	1,286	1,320	1.1%
Services to U.S. Treasury and Gov't Agencies	1,049	1,101	1,161	1,178	1,241	1,319	4.7%
Services to Financial Institutions and the Public	2,648	2,618	2,568	2,550	2,598	2,654	0.0%
Supervision	3,886	4,006	4,140	4,143	4,117	4,102	1.1%
Fee-Based Services to Financial Institutions	683	679	720	753	760	716	1.0%
Local Support and Overhead	6,698	6,727	6,820	6,822	6,889	7,006	0.9%
Nationally Provided Support	1,328	1,317	1,374	1,349	659	682	-12.5%
Centralized Service Providers	1,204	1,275	1,262	1,302	2,016	2,056	11.3%
Total	18,744	18,986	19,330	19,393	19,565	19,856	1.2%

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. Begininning in 2018, NITO ANP are recategorized as Centralized Service Providers to align with the corresponding cost accounting policy change.

BUDGETED CHANGES TO CASH COMPENSATION PROGRAMS OF THE FEDERAL RESERVE BANKS Officers and Staff by District, 2018

(Dollars in Thousands)

			Additions	to Salary Base			Total		
District	Total 12/31/18 Salary Liability (a)	Merit (b)	Equity & Market Adjustments (c)	Promotions and Reclasses (d)	Percentage Increase to Total 12/31/18 Salary Liability (b + c + d) / (a)	Incremental Variable Pay (e)	Dollars $(b+c+d+e)$	Percentage Increase to Total 12/31/18 Salary Liability (b + c + d + e) / (a)	
Boston	128,902	3,867	645	1,289	4.5%	144	5,945	4.6%	
New York	471,311	14,139	2,353	3,967	4.3%	2,643	23,102	4.9%	
Philadelphia	93,475	2,804	468	935	4.5%	332	4,540	4.9%	
Cleveland	98,623	2,959	493	986	4.5%	302	4,740	4.8%	
Richmond	148,419	4,453	742	1,272	4.4%	386	6,852	4.6%	
Atlanta	178,785	5,364	894	1,788	4.5%	511	8,556	4.8%	
Chicago	200,228	6,007	1,001	2,002	4.5%	429	9,439	4.7%	
St. Louis	146,054	4,382	730	1,461	4.5%	615	7,187	4.9%	
Minneapolis	99,379	2,981	497	994	4.5%	716	5,188	5.2%	
Kansas City	190,630	5,719	953	1,906	4.5%	643	9,221	4.8%	
Dallas	122,204	3,666	525	1,222	4.4%	141	5,554	4.5%	
San Francisco	211,448	6,261	1,086	2,121	4.5%	1,353	10,821	5.1%	
FRIT	166,323	4,989	832	1,663	4.5%	727	8,211	4.9%	
OEB	9,439	297	34	94	4.5%	43	467	5.0%	
Total	2,265,219	67,887	11,253	21,701	4.5%	8,985	109,825	4.8%	

The table above shows the cash compensation components that add to base salary (merit, equity, and promotion) and the 2019 incremental increase in variable pay expense compared with those estimated for 2018.

December 31, 2018 Salary Liability: the annualized salary expense based on the salaries in effect on December 31.

Merit: the amount of 2019 budgeted salary expense that reflects salary increases for individuals based on performance.

Equity Adjustments: the amount of 2019 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 2019 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 2019 budgeted incentive payments (payment for the achievement of pre-determined goals) and cash awards (awards in recognition of exceptional achievements) compared to the 2018 estimate.

CAPITAL OUTLAYS OF THE FEDERAL RESERVE BANKS

by District, 2018 and 2019 (Dollars in Thousands)

	2018	2018	2019		Variance		
District	Budget	Forecast	Budget	18F to 18B	19B to 18F	19B to 18B	
Boston	20,458	12,850	15,093	-37.2%	17.5%	-26.2%	
New York	91,980	116,410	125,643	26.6%	7.9%	36.6%	
Philadelphia	34,623	22,550	36,178	-34.9%	60.4%	4.5%	
Cleveland	13,670	12,752	23,080	-6.7%	81.0%	68.8%	
Richmond	20,438	18,769	15,187	-8.2%	-19.1%	-25.7%	
Atlanta	21,073	23,240	23,163	10.3%	-0.3%	9.9%	
Chicago	22,323	12,602	26,690	-43.5%	111.8%	19.6%	
St. Louis	6,600	6,034	6,664	-8.6%	10.4%	1.0%	
Minneapolis	19,300	11,814	25,963	-38.8%	119.8%	34.5%	
Kansas City	23,439	20,820	32,911	-11.2%	58.1%	40.4%	
Dallas	20,141	16,005	24,166	-20.5%	51.0%	20.0%	
San Francisco	30,854	28,058	53,134	-9.1%	89.4%	72.2%	
Subtotal	324,899	301,904	407,873	-7.1%	35.1%	25.5%	
FRIT	81,645	64,381	75,257	-21.1%	16.9%	-7.8%	
OEB	50	50	230	0.0%	360.0%	360.0%	
Total	406,594	366,334	483,360	-9.9%	31.9%	18.9%	

BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

DIVISION OF RESERVE BANK OPERATIONS AND PAYMENT SYSTEMS

2019 Federal Reserve Bank Budgets

ACTION

On December 11, 2018, the Board approved the 2019 Reserve Bank operating budgets totaling \$4,584.4 million, an increase of \$161.6 million, or 3.7 percent, from the 2018 forecasted expenses. The chair of the Committee on Federal Reserve Bank Affairs designated two components of the operating expense budgets for conditional approval:

- a) Because the U.S. Department of the Treasury's Bureau of the Fiscal Service (Fiscal Service) had not fully determined the level of funding for fiscal services provided by the Federal Reserve Banks before December 11, the portion of the 2019 Banks' budgets associated with services to the Treasury was not considered final. Expenses associated with services to the Treasury (\$668.5 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 required for material revisions, which represent an adjustment of one percent or more to the 2019 Reserve Bank operating budgets of \$4,584.4 million. For revisions that are not material, that is, which represent an adjustment of less than one percent of the 2019 Reserve Bank operating budgets of \$4,584.4 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.
- b) Expenses associated with the procurement, financial, and human resource management projects (\$15.5 million) require additional review and approval by the director of the Division of Reserve Bank Operations and Payment Systems.

The Board also approved the Reserve Bank, Federal Reserve Information Technology (FRIT), and the Office of Employee Benefits (OEB) single and multiyear capital budgets in three categories.²

¹These 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.

²See tables in the attachment for expense and capital amounts by Reserve Bank.

- a) Significant capital expenditures multiyear approval for significant capital expenditures (typically expenditures exceeding \$1 million) totaling \$490.4 million for 2019 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 \$95.8 million for 2019; and
- c) conditional approval
 - i. The chair of the Committee on Federal Reserve Bank Affairs designated \$100.7 million in capital expenditures in the 2019 budget for conditional approval.³ 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 \$83.4 million in Treasury-related capital investments for conditional approval in 2019, pending authorization from Fiscal Service. These investments are 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 2019 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

³Generally, 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.

Each Reserve Bank's budget is reviewed by the Bank's senior leadership and its board of directors. Board staff analyzes the Banks' budget submissions both individually and in the aggregate.

TOTAL EXPENSE AND EMPLOYMENT SUMMARY

Reserve Bank Expenses and Staffing (dollars in millions)											
	2018	2018	18F to		2019	19B t	o 18F	18F 19B to 18			
	Budget	Forecast	Amount	Percent	Budget	Amount	Percent	Amount	Percent		
Central Bank Services	\$3,382.4	\$3,362.6	-\$19.8	-0.6%	\$3,474.6	\$112.0	3.3%	\$92.2	2.7%		
Monetary Policy	504.8	502.8	-2.0	-0.4%	527.3	24.4	4.9%	22.5	4.5%		
Open Market	216.7	221.8	5.1	2.3%	229.3	7.4	3.4%	12.5	5.8%		
Public Programs	238.1	236.9	-1.2	-0.5%	244.6	7.7	3.3%	6.5	2.7%		
Supervision	1,449.3	1,434.1	-15.2	-1.1%	1,473.3	39.2	2.7%	24.0	1.7%		
Cash	688.5	681.2	-7.3	-1.1%	704.2	23.0	3.4%	15.7	2.3%		
Loans to Depository Institutions	83.7	86.2	2.5	2.9%	87.8	1.6	1.9%	4.1	4.9%		
All Other Central Bank Services ¹	201.2	199.6	-1.6	-0.8%	208.1	8.5	4.3%	6.9	3.4%		
Fee-Based Services ²	452.9	443.1	-9.8	-2.2%	441.3	-1.8	-0.4%	-11.6	-2.6%		
Total Expense (before Treasury Services)	\$3,835.2	\$3,805.7	-\$29.5	-0.8%	\$3,915.9	\$110.2	2.9%	\$80.6	2.1%		
Treasury Services ³	616.1	617.1	1.1	0.2%	668.5	51.4	8.3%	52.5	8.5%		
Total Expense (including Treasury Services)	\$4,451.3	\$4,422.8	-\$28.5	-0.6%	\$4,584.4	\$161.6	3.7%	\$133.1	3.0%		
Total ANP 4	19,878	19,565	-312	-1.6%	19,887	322	1.6%	9	0.0%		

Note: Here and in subsequent tables, components may not sum to totals and may not yield percentages shown because of rounding.

2019 Operating Expenses, Net of Revenue and Reimbursements

The proposed 2019 operating budgets of the Reserve Banks, inclusive of Treasury services, total \$4,584.4 million, which is \$161.6 million, or 3.7 percent, higher than the 2018

forecast.⁴ A quarter of Reserve Bank expenses in the 2019 budget are offset by either priced services revenue (9.6 percent) or reimbursable claims for services provided

Change in Net Expenses											
	(dollars in millions)										
	2018	2018	2019	Percent	Change						
	Budget	Forecast	Budget	18F - 18B	19B-18F						
Total Expense	\$4,451.3	\$4,422.8	\$4,584.4	-0.6%	3.7%						
Less:											
Priced Services Revenue*	441.7	441.6	440.3	0.0%	-0.3%						
Reimbursable Claims	668.2	668.3	720.7	0.0%	7.8%						
Net Expenses	\$3,341.4	\$3,313.0	\$3,423.4	-0.9%	3.3%						

^{*}Full cost recovery is projected in the aggregate for priced services in 2019.

¹ Includes Special Safekeeping Services, Reserve Accounts and Risk Administration, and Services to Other Central Banks.

² Fee-based services include all expenses associated with the Priced Services, including the check, FedACH, Fedwire Funds and National Settlement, and Fedwire Securities services.

³ Pending approval by Fiscal Service.

⁴ ANP is the average number of employees in terms of full-time positions for the period. For instance, a full-time employee who works one-half of the year counts as 0.5 ANP for that calendar year; two half-time employees who work the full year count as 1 ANP.

⁴The forecast is based on actual expenses incurred through September 2018 and a forecast for the remaining months of the year.

to the Treasury and other agencies (15.7 percent).⁵ Budgeted 2019 operating expenses, net of revenue and reimbursements, are expected to increase \$110.4 million, or 3.3 percent, from 2018 forecasted expenses.⁶ Budgeted 2019 priced services revenue is 0.3 percent lower than the 2018 forecasted level, driven largely by decreased check volumes, offset by higher FedACH volumes and incremental revenue for the new Exception Resolution Service.⁷ Reimbursable claims are expected to increase 7.8 percent in 2019, reflecting increased activity for new or expanded Treasury services, pending approval by Fiscal Service.

2018 Budget Performance

Total 2018 operating expenses for the Reserve Banks are forecasted to be \$4,422.8 million, which is \$28.5 million, or 0.6 percent, less than the approved 2018 budget of \$4,451.3

million. The forecasted average number of personnel (ANP) is 19,565, which is 312, or 1.6 percent, less than the 2018 budget, largely because of delays in hiring in the supervision, support and overhead, and IT functions. The forecasted 2018 capital spending for the Reserve Banks, FRIT, and OEB is less than budget by \$40.3 million, or 9.9 percent, because of plan changes, including timing and scope for some initiatives. These underruns are partially offset by increased expenses for the Treasury Web

Significant Staffing (ANP) Changes 2018 Forecast to 2018 Budget					
2018 Budget	19,878				
Supervision	(82)				
Support and Overhead	(79)				
Information Technology	(74)				
Monetary Policy	(25)				
Cash	(22)				
Other	(17)				
Public Programs	(12)				
Treasury	(1)				
2018 Forecast	19,565				

Application Infrastructure (TWAI), the Treasury auction program, and a software write-off for the Post Payment System (PPS) initiative, which will be strategically reset and redeveloped as the Post Payment Modernization Initiative (PPMI) in the 2019 budget year.⁸

⁵The 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.

⁶Reimbursable 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. The supervision assessment represents approximately 40 percent of total supervision expenses.

⁷Exception Resolution Service provides an automated means for participants to manage ACH exceptions for entries settled through FedACH.

⁸TWAI is a dedicated, distributed computing environment that houses multiple Treasury applications. The PPS initiative was a multiyear effort to modernize several of the Treasury's legacy post-payment processing systems into

2019 Budgeted Operating Expenses

The 2019 operating budgets of the Reserve Banks, excluding services to the Treasury, total \$3,915.9 million, which is \$110.2 million, or 2.9 percent, higher than the 2018 forecast. The largest increase is in the supervision function, which continues to shift from implementing significant regulatory reforms of the post-crisis era to providing more-efficient oversight while responding to changes in the current environment. The growth in 2019 is primarily for the ongoing support of the supervision portfolio, national and horizontal review initiatives, and the continued development and implementation of the cybersecurity supervision program. Increases in cash expenses are driven by the first phase of the next-generation currency-processing program (NextGen). Growth in monetary policy reflects increased resources dedicated to regional economic research, including new studies on inflation and low- and moderate-income communities.

The 2019 operating budgets of the Reserve Banks, including services to the Treasury, total \$4,584.4 million, which is \$161.6 million, or 3.7 percent, higher than the 2018 forecast. Budgeted expenses for services to the Treasury total \$668.5 million, an increase of \$51.4 million, or 8.3 percent, from the 2018 forecast, primarily to support new and ongoing technology development for the Treasury auction program, TWAI, Stored Value Card (SVC), expanded Do Not Pay (DNP) analytics, and Pay.gov initiatives. ¹⁰ Fiscal Service has not yet approved the level of funding for fiscal services reflected in the 2019 proposed Reserve Banks' budgets. Once there is final action by Fiscal Service on the level of approved funding, each Reserve Bank may need to update, as appropriate, the 2019 budget to include the approved funding recommendations. Approval of the 2019 budgets is contingent on final approval of funding levels from Fiscal Service. ¹¹

a single application to enhance operations, reduce expenses, improve data analytics capabilities, and provide a centralized and standardized set of payment data. PPMI will modernize and consolidate five of Treasury's legacy post-payment processing systems into a single application.

⁹The NextGen program is a multiyear initiative to replace high-speed currency-processing equipment in cash offices across the Federal Reserve System.

¹⁰The SVC program comprises three military cash-management programs: EagleCash, EZpay, and Navy Cash. These programs provide electronic payment methods for goods and services on military bases and Navy ships, both domestic and overseas, to reduce costs and increase convenience for the military and service members. Do Not Pay helps agencies mitigate and eliminate improper payments. Pay.gov is an application that allows the public to use the internet to authorize and initiate payments to federal agencies.

¹¹Board 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 2019 Reserve Bank operating budgets of \$4,584.4 million. For revisions that are not material, which represent an adjustment of less than one percent of the

The chair of the Committee on Federal Reserve Bank Affairs has designated a portion of the 2019 operating expense budgets (\$15.5 million) associated with the adoption, integration, and implementation of the procurement, financial management, and human capital technology initiatives for conditional approval, requiring additional review and approval by the director of the Division of Reserve Bank Operations and Payment Systems. ¹²

2019 Personnel Expenses and Staffing

Total 2019 budgeted employment for the Reserve Banks, FRIT, and OEB is 19,887 ANP, an increase of 322 ANP, or 1.6 percent, from 2018 forecasted staff levels. In IT, resource

additions support information security initiatives and application development projects for Treasury and supervision and to enhance data analytics and integration services. Approximately one third of the increase is attributable to updated requirements for ongoing programs in Treasury services, including SVC, DNP, and Pay.gov. ¹³ Support and overhead functions plan to add resources to strengthen strategic planning, enterprise risk management, and

Significant Staffing (ANP) Changes 2019 Budget to 2018 Forecast	3
2018 Forecast	19,565
Information Technology	123
Support and Overhead	57
Monetary Policy	33
Cash	31
Public Programs	22
Other	7
Supervision	(15)
Fee-Based Services	(44)
2019 Budget (before Treasury Svcs)	19,779
Treasury Services	108
2019 Budget (including Treasury Svcs)	19,887

law enforcement capabilities. Further contributing to the growth are resources to support regional economic research and outreach initiatives, the NextGen program, and a multiyear effort to enhance the resiliency, security, and customer experience of the FedLine access solutions. ¹⁴ Increases are offset by reductions in the check function in recognition of operational efficiencies; in ACH following the planned completion of the multiyear ACH Modernization initiative; and in

²⁰¹⁹ Reserve Bank operating budgets of \$4,584.4 million, the Board has 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.

¹²The multiyear initiative will replace legacy procurement, financial management, and human capital systems to allow for greater capability and flexibility in managing, reporting and analyzing System financial and human capital information.

¹³Staffing for services to the Treasury and for Treasury-related IT initiatives are pending approval from Fiscal Service.

¹⁴FedLine provides financial institutions with direct access to Federal Reserve System services.

supervision related to efficiency efforts, changes in supervisory responsibilities, and the enactment of Economic Growth, Regulatory Relief, and Consumer Protection Act. ¹⁵

Reserve Bank officer and staff salaries and other personnel expenses for 2019 total \$3,399.1 million, an increase of \$120.0 million, or 3.7 percent, from 2018 forecasted expenses. The increase reflects the expenses associated with additional staff as well as budgeted salary adjustments, including merit increases, equity adjustments, promotions, and funding for variable pay.

2019 Capital Budgets

The 2019 capital budgets submitted by the Reserve Banks, FRIT, and OEB total \$485.1 million. The 2019 capital budget has increased \$118.8 million, or 24.0 percent, from the 2018

forecasted levels of \$366.3 million, largely reflecting ongoing multiyear building and IT strategic initiatives. Initiatives in the 2019 capital budget support major workspace and parking space renovations, address aging building infrastructure in several Reserve Banks, improve IT infrastructure, and provide application upgrades and releases. The chair of the

2019 Capital Budget

	2019 Capital	2020 and Beyond Capital	Total
Capital Expenditures Designated for	\$184.1	\$289.4	\$473.5
Conditional Approval ¹			
Projects previously designated	84.2	190.7	275.0
New conditionally approved projects	16.5	45.4	61.9
Treasury Initiatives ²	83.4	53.2	136.6
Significant Capital Expenditures	205.2	285.2	490.4
Other Capital Expenditures	95.8		95.8
Art	0.2		0.2
Building	18.5		18.5
Building, Machinery, & Equipment	20.8		20.8
Equipment	19.6		19.6
Furniture, Furnishings, & Fixtures	5.7		5.7
Land and Other Real Estate	0.9		0.9
Leasehold Improvements	0.6		0.6
Software	29.7		29.7
Total Capital Budget	\$485.1	\$574.6	\$1,059.7

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

Committee on Federal Reserve Bank Affairs designated a portion of the projects comprising the 2019 capital budgets (\$184.1 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 was approved in two categories: (1) approval for significant capital

² Pending approval by Fiscal Service.

¹⁵The 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. The Economic Growth, Regulatory Relief, and Consumer Protection Act, enacted in May of 2018, aims to right-size the regulatory system for smaller financial institutions, allowing community banks and credit unions to succeed and invest further in their local areas.

expenditures for 2019 and the remaining term of these projects (\$490.4 million) and (2) single-year approval for all other capital expenditures by asset class (\$95.8 million).

Capital expenditures designated for conditional approval

The chair of the Committee on Federal Reserve Bank Affairs designated for conditional approval budgeted 2019 capital expenditures of \$184.1 million and total multiyear budgeted expenditures of \$473.5 million for 2019 and future years. The expenditures designated for conditional approval include large-scale building projects to renovate office space, increase parking, and upgrade mechanical and electrical infrastructure. Technology projects include Fedwire and FedLine initiatives and updates to supervision applications. In addition, the chair of the Committee on Federal Reserve Bank Affairs designated for conditional approval the expense and capital investments in the procurement, financial, and human capital management programs; and 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 \$490.4 million for 2019 and future years, of which the single-year 2019 budgeted expenditures are \$205.2 million. This category includes building expenditures for office space renovations, infrastructure upgrades, building automation, and security enhancements. IT projects include ongoing IT infrastructure investments, initiatives that enable better access to data and enhance cyber-security and cyber-resiliency, and applications to support fee-based services, supervision, cash, and open market operations.

Other capital expenditures

The 2019 capital budgets include \$95.2 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 4.1 percent annually from 2014 actual through 2019 budget.

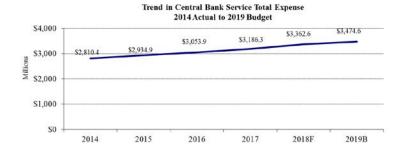
Total F	Total Expenses of the Federal Reserve Banks, by Functional Area											
(dollars in millions)												
	2014	2015	2016	2017	2018	2019	CAGR*					
	Actual	Actual	Actual	Actual	Forecast	Budget	2014-2019					
Monetary and Economic Policy	\$609.2	\$631.9	\$655.1	\$693.4	\$724.6	\$756.5	4.4%					
Services to U.S. Treasury and Gov't Agencies	531.7	550.5	569.9	597.6	617.1	668.5	4.7%					
Services to Financial Institutions and the Public	1,032.7	1,050.9	1,088.8	1,127.0	1,203.9	1,244.8	3.8%					
Supervision		1,252.1	1,309.9	1,366.0	1,434.1	1,473.3	4.7%					
Fee-Based Services to Financial Institutions	410.3	389.9	408.3	425.0	443.1	441.3	1.5%					
Total	\$3,752.3	\$3,875.3	\$4,032.1	\$4,209.0	\$4,422.8	\$4,584.4	4.1%					

^{*}Compound Annual Growth Rate

Trends in Central Bank Total 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 4.3 percent annually over the past five years. Supervision has experienced

the largest rate of growth, with an average of 4.7 percent annual expense growth over the past five years and a corresponding increase of 216 ANP since 2014. The additional resources and staffing



were added over this period for the implementation of the Dodd-Frank Act requirements and for the buildout of the cybersecurity supervision program. Current efforts to focus on efficiencies have reduced the growth rate from the higher levels experienced in prior years.

Monetary policy expenses have grown an average of 4.4 percent annually. This growth is largely driven by increases at the Federal Reserve Bank of New York, reflecting a focus on improving operational resiliency, organizational changes, 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.

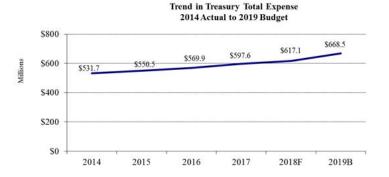
Expenses in the cash area, which is a component of services to financial institutions and the public, have increased an average of 4.5 percent annually, reflecting the multiyear development and implementation of a modernized cash-processing and inventory-tracking

application and the onset of funding for the NextGen currency-processing program. These increases have been partially offset by lower expenses due to efficiency improvements in cash operations.

Trends in Treasury Services Expense

Treasury services expenses have increased an average of 4.7 percent annually from 2014 to 2019. Expenses have increased to meet the Treasury's evolving needs, including the

automation of the Treasury's collection and payment services, the addition of Treasury applications to the TWAI, the one-time transition costs associated with the consolidation of Fiscal Agent support functions to fewer



sites, and other requested projects and enhancements. Growth in recent years is largely attributable to expanding Government-Wide Accounting services, DNP, support for the SVC program and transition, technology development for the Treasury auction program, and the development and transition of PPS. ¹⁶ A portion of this growth has been offset by Reserve Bank efficiency initiatives, the consolidation of various Fiscal Agent support functions, and program changes initiated by the Treasury.

Trends in Fee-Based Services Total Expense

Fee-based services expenses have increased an average of 1.5 percent annually since 2014. Expense increases are primarily for investments associated with multiyear technology

initiatives to modernize processing platforms for Fedwire and ACH.

These investments are expected to enhance efficiency, the overall quality of operations, and the Reserve Banks' ability to offer



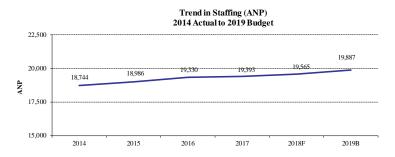
¹⁶Government-Wide Accounting Services include applications for cash forecasting and reporting; for accounting, reporting, and reconcilement; for moving agency-appropriated funds on Treasury's books; and for processing intragovernmental transactions that result from payment transfers between agencies.

additional services to depository institutions. Partially offsetting these investments are check services expenses, which have declined an average of 0.7 percent annually since 2014 because of the decline of paper check volume and the efficiencies associated with electronic check processing.

Trends in Staffing

Total staffing levels have increased an average of 1.2 percent annually since 2014. The primary driver is to support ongoing operations and new initiatives for the Treasury. Growth in

IT resources support information security efforts, large application-development projects, and enduser services. Supervision resource levels increased to enable supervision to fulfill its mandated

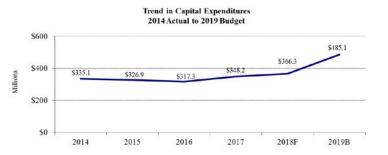


responsibilities, as expanded by the Dodd-Frank Act. In recent years, improving conditions and the implementation of the Fixing America's Surface Transportation (FAST) Act and the Economic Growth, Regulatory Relief, and Consumer Protection Act have allowed Supervision to reallocate resources and find staffing efficiencies. Monetary policy areas have grown modestly to support financial stability monitoring, operational activities, and regional economic research. These increases are offset, in part, by relatively stable staffing in the cash function as increases to support strategic initiatives are counterbalanced by operational efficiencies and decreased staffing in other central bank services.

Trends in Capital

Total capital spending has increased at an average of 7.7 percent annually since 2014 and

has included funding for multiyear building projects and large-scale automation projects such as modernizing the cashprocessing and inventorytracking infrastructure, Fedwire



initiatives, and Treasury applications. In 2019, major building renovation and infrastructure

projects in several Reserve Banks will ramp up, while concurrently, the Federal Reserve System will continue to invest in automation initiatives and IT infrastructure.

ATTACHMENT

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.

TOTAL EXPENSES OF THE FEDERAL RESERVE BANKS

by District, 2018 and 2019 (Dollars in Thousands)

	2018	2018	2019	Variance			
District	Budget	Forecast	Budget	18F to 18B	19B to 18F	19B to 18B	
Boston	232,955	227,070	231,572	-2.5%	2.0%	-0.6%	
New York	1,006,671	1,012,706	1,038,684	0.6%	2.6%	3.2%	
Philadelphia	191,787	192,453	194,838	0.3%	1.2%	1.6%	
Cleveland	203,294	201,337	215,460	-1.0%	7.0%	6.0%	
Richmond	479,818	476,988	503,568	-0.6%	5.6%	4.9%	
Atlanta	420,306	413,816	415,457	-1.5%	0.4%	-1.2%	
Chicago	397,752	385,325	396,116	-3.1%	2.8%	-0.4%	
St. Louis	412,040	409,081	440,521	-0.7%	7.7%	6.9%	
Minneapolis	173,998	172,955	179,959	-0.6%	4.0%	3.4%	
Kansas City	307,319	312,317	332,707	1.6%	6.5%	8.3%	
Dallas	238,573	232,921	239,079	-2.4%	2.6%	0.2%	
San Francisco	386,817	385,861	396,470	-0.2%	2.7%	2.5%	
Total	4,451,329	4,422,831	4,584,430	-0.6%	3.7%	3.0%	

TOTAL EMPLOYMENT OF THE FEDERAL RESERVE BANKS

by District, 2018 and 2019 (Average Number of Personnel)

	2018	2018	2019	Variance		
District	Budget	Forecast	Budget	18F to 18B	19B to 18F	19B to 18B
Boston	1,086	1,054	1,037	-32	-17	-49
New York	3,277	3,179	3,226	-99	48	-51
Philadelphia	876	883	859	7	-24	-17
Cleveland	999	985	1,024	-14	39	25
Richmond	1,498	1,458	1,481	-40	24	-17
Atlanta	1,774	1,759	1,737	-16	-22	-37
Chicago	1,605	1,552	1,599	-53	47	-7
St. Louis	1,442	1,394	1,435	-48	41	-7
Minneapolis	1,030	1,021	1,060	-10	39	30
Kansas City	1,910	1,951	2,006	42	54	96
Dallas	1,320	1,279	1,278	-42	-1	-42
San Francisco	1,732	1,711	1,765	-22	54	32
Subtotal	18,550	18,224	18,507	-327	284	-43
FRIT	1,270	1,287	1,321	17	34	51
OEB	58	55	59	-2	4	1
Total	19,878	19,565	19,887	-312	322	9

Table C

TOTAL EMPLOYMENT OF THE FEDERAL RESERVE BANKS¹

by Functional Area (Average Number of Personnel)

	2014	2015	2016	2017	2018F	2019B	CAGR 2014-2019
Monetary and Economic Policy	1,247	1,262	1,284	1,296	1,286	1,320	1.1%
Services to U.S. Treasury and Gov't Agencies	1,049	1,101	1,161	1,178	1,241	1,350	5.2%
Services to Financial Institutions and the Public	2,648	2,618	2,568	2,550	2,598	2,654	0.0%
Supervision	3,886	4,006	4,140	4,143	4,117	4,102	1.1%
Fee-Based Services to Financial Institutions	683	679	720	753	760	716	1.0%
Local Support and Overhead	6,698	6,727	6,820	6,822	6,889	7,006	0.9%
Nationally Provided Support	1,328	1,317	1,374	1,349	659	682	-12.5%
Centralized Service Providers	1,204	1,275	1,262	1,302	2,016	2,056	11.3%
Total	18,744	18,986	19,330	19,393	19,565	19,887	1.2%

¹ Includes 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. Begininning in 2018, NITO ANP are recategorized as Centralized Service Providers to align with the corresponding cost accounting policy change.

BUDGETED CHANGES TO CASH COMPENSATION PROGRAMS OF THE FEDERAL RESERVE BANKS Officers and Staff by District, 2018 (Dollars in Thousands)

			Additions	to Salary Base		Total		
District	Total 12/31/18 Salary Liability (a)	Merit (b)	Equity & Market Adjustments (c)	Promotions and Reclasses (d)	Percentage Increase to Total 12/31/18 Salary Liability (b + c + d) / (a)	Incremental Variable Pay (e)	Dollars (b + c + d + e)	Percentage Increase to Total 12/31/18 Salary Liability (b + c + d + e) / (a)
Boston	128,902	3,867	645	1,289	4.5%	144	5,945	4.6%
New York	471,311	14,139	2,353	3,967	4.3%	2,643	23,102	4.9%
Philadelphia	93,475	2,804	468	935	4.5%	332	4,540	4.9%
Cleveland	99,461	2,984	497	995	4.5%	517	4,993	5.0%
Richmond	148,419	4,453	742	1,272	4.4%	386	6,852	4.6%
Atlanta	178,785	5,364	894	1,788	4.5%	511	8,556	4.8%
Chicago	200,228	6,007	1,001	2,002	4.5%	429	9,439	4.7%
St. Louis	146,054	4,382	730	1,461	4.5%	615	7,187	4.9%
Minneapolis	99,379	2,981	497	994	4.5%	716	5,188	5.2%
Kansas City	190,630	5,719	953	1,906	4.5%	643	9,221	4.8%
Dallas	122,204	3,666	525	1,222	4.4%	141	5,554	4.5%
San Francisco	211,448	6,261	1,086	2,121	4.5%	1,353	10,821	5.1%
FRIT	166,323	4,989	832	1,663	4.5%	727	8,211	4.9%
OEB	9,439	297	34	94	4.5%	43	467	5.0%
Total	2,266,056	67,912	11,257	21,709	4.5%	9,200	110,079	4.9%

The table above shows the cash compensation components that add to base salary (merit, equity, and promotion) and the 2019 incremental increase in variable pay expense compared with those estimated for 2018.

December 31, 2018 Salary Liability: the annualized salary expense based on the salaries in effect on December 31.

Merit: the amount of 2019 budgeted salary expense that reflects salary increases for individuals based on performance.

Equity Adjustments: the amount of 2019 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 2019 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 2019 budgeted incentive payments (payment for the achievement of pre-determined goals) and cash awards (awards in recognition of exceptional achievements) compared to the 2018 estimate.

CAPITAL OUTLAYS OF THE FEDERAL RESERVE BANKS

by District, 2018 and 2019 (Dollars in Thousands)

	2018	2018	2019	Variance		
District	Budget	Forecast	Budget	18F to 18B	19B to 18F	19B to 18B
Boston	20,458	12,850	15,093	-37.2%	17.5%	-26.2%
New York	91,980	116,410	119,566	26.6%	2.7%	30.0%
Philadelphia	34,623	22,550	36,178	-34.9%	60.4%	4.5%
Cleveland	13,670	12,752	23,934	-6.7%	87.7%	75.1%
Richmond	20,438	18,769	15,187	-8.2%	-19.1%	-25.7%
Atlanta	21,073	23,240	23,163	10.3%	-0.3%	9.9%
Chicago	22,323	12,602	26,690	-43.5%	111.8%	19.6%
St. Louis	6,600	6,034	6,664	-8.6%	10.4%	1.0%
Minneapolis	19,300	11,814	25,963	-38.8%	119.8%	34.5%
Kansas City	23,439	20,820	32,911	-11.2%	58.1%	40.4%
Dallas	20,141	16,005	24,166	-20.5%	51.0%	20.0%
San Francisco	30,854	28,058	53,134	-9.1%	89.4%	72.2%
Subtotal	324,899	301,904	402,649	-7.1%	33.4%	23.9%
FRIT	81,645	64,381	82,233	-21.1%	27.7%	0.7%
OEB	50	50	230	0.0%	360.0%	360.0%
Total	406,594	366,334	485,112	-9.9%	32.4%	19.3%