

BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM  
DIVISION OF RESERVE BANK OPERATIONS AND PAYMENT SYSTEMS

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**2019 Currency Budget**

**Action**

On December 12, 2018, the Board approved the calendar year (CY) 2019 currency operating budget of \$955.8 million and a multi-cycle capital budget of \$3.2 million.<sup>1</sup>

**Discussion**

Under authority delegated by the Board, the director of the Division of Reserve Bank Operations and Payment Systems (RBOPS) submits an annual fiscal year (FY) print order for new currency to the director of the BEP.<sup>2</sup> Upon reviewing the order, the BEP estimates printing costs for new currency during the upcoming calendar year, which staff uses to prepare the annual currency budget. The Board then reviews and approves the final budget. Once the Board approves the currency budget, it assesses the costs of currency to each Federal Reserve Bank on a monthly basis.

The proposed 2019 operating budget includes \$210.0 million in reimbursements to the Bureau of Engraving and Printing (BEP) to cover their facilities improvement costs to expand their facility in Fort Worth, Texas, and for BEP to contract for design and engineering studies in support of a new facility to replace their existing Washington, D.C., facility. The proposed multi-cycle capital budget covers information technology equipment for exploratory research and development (R&D) in automated counterfeit inspection. Table 1 provides details on the Board's 2018 budget, 2018 forecast, and proposed 2019 budget.

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<sup>1</sup> The proposed 2019 operating budget represents an increase of \$102.7 million, or 12.0 percent, from 2018 forecasted expenses. Excluding reimbursements to BEP for their facility improvements, the proposed 2019 budget is \$745.8 million, which is \$107.3 million, or 12.6 percent, less than 2018 forecast. No capital funds were included in the 2018 budget.

<sup>2</sup> Please refer to [the Board's public website](#) for more information about the Board's annual print order for new currency.

**Table 1: Currency budget (calendar year)**

	2018 Budget (000s) <sup>c</sup>	2018 Forecast (000s)	Variance 18F to 18B		2019 Budget (000s)	Variance 19B to 18F		Variance 19B to 18B	
			Amount (000s)	Percent		Amount (000s)	Percent	Amount (000s)	Percent
<b>Printing Federal Reserve notes</b>	<b>\$800,995</b>	<b>\$799,886</b>	<b>-\$1,109</b>	<b>-0.1</b>	<b>\$690,760</b>	<b>-\$109,125</b>	<b>-13.6</b>	<b>-\$110,235</b>	<b>-13.8</b>
BEP fixed printing costs	\$468,876	\$468,876	\$0	0.0	\$401,938	-\$66,938	-14.3	-\$66,938	-14.3
BEP variable printing costs	\$332,119	\$331,010	-\$1,109	-0.3	\$288,822	-\$42,187	-12.7	-\$43,297	-13.0
<b>BEP facility costs</b>	<b>\$0</b>	<b>\$4</b>	<b>\$4</b>	<b>N/A</b>	<b>\$210,000</b>	<b>\$209,996</b>	<b>N/A*</b>	<b>\$210,000</b>	<b>N/A</b>
Ft. Worth facility expansion	\$0	\$0	\$0	N/A	\$150,000	\$150,000	N/A*	\$150,000	N/A
DC facility design work	\$0	\$4	\$4	N/A	\$60,000	\$59,996	N/A*	\$60,000	N/A
<b>BEP support costs</b>	<b>\$4,983</b>	<b>\$4,805</b>	<b>-\$178</b>	<b>-3.6</b>	<b>\$4,629</b>	<b>-\$176</b>	<b>-3.7</b>	<b>-\$353</b>	<b>-7.1</b>
Currency reader	\$1,286	\$1,244	-\$42	-3.2	\$957	-\$287	-23.1	-\$329	-25.6
Other <sup>a</sup>	\$3,697	\$3,561	-\$136	-3.7	\$3,673	\$111	3.1	-\$25	-0.7
<b>Board costs</b>	<b>\$55,757</b>	<b>\$48,366</b>	<b>-\$7,391</b>	<b>-13.3</b>	<b>\$50,370</b>	<b>\$2,003</b>	<b>4.1</b>	<b>-\$5,387</b>	<b>-9.7</b>
Currency transportation	\$24,260	\$21,219	-\$3,041	-12.5	\$22,497	\$1,278	6.0	-\$1,764	-7.3
Research and development	\$7,740	\$5,981	-\$1,759	-22.7	\$11,768	\$5,786	96.7	\$4,028	52.0
Annual contributions and management support <sup>b</sup>	\$7,145	\$6,590	-\$555	-7.8	\$7,100	\$510	7.7	-\$45	-0.6
Quality assurance	\$14,000	\$12,500	-\$1,500	-10.7	\$6,500	-\$6,000	-48.0	-\$7,500	-53.6
Currency education	\$2,531	\$2,013	-\$518	-20.5	\$2,430	\$417	20.7	-\$101	-4.0
Depreciation	\$80	\$63	-\$17	-21.6	\$75	\$12	18.5	-\$6	-7.1
<b>Operating budget</b>	<b>\$861,734</b>	<b>\$853,061</b>	<b>-\$8,674</b>	<b>-1.0</b>	<b>\$955,759</b>	<b>\$102,698</b>	<b>12.0</b>	<b>\$94,025</b>	<b>10.9</b>
<b>Capital expenditures</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>N/A</b>	<b>\$3,207</b>	<b>\$3,207</b>	<b>N/A</b>	<b>\$3,207</b>	<b>N/A</b>
Multi-year cycle capital	\$0	\$0	\$0	N/A	\$3,207	\$3,207	N/A	\$3,207	N/A

<sup>a</sup> Other BEP expenses include costs to reimburse the BEP for expenses incurred by its Destruction Standards and Compliance Division of the Office of Compliance and Mutilated Currency Division of the Office of Financial Management.

<sup>b</sup> The annual contributions and management support budget category was previously titled counterfeit deterrence.

<sup>c</sup> Figures shown above have been rounded to the nearest thousand, but calculations are based on actual values. In some cases, this results in rounding errors for sub-totals, totals, and variance.

N/A\* - The percentage change is greater than 100 percent and based on comparison to a *de minimis* value in the prior year.

Table 2 provides details on the volume of notes the Board included in its 2018 budget, the 2018 forecast, and the volume of notes the Board estimates the BEP will deliver during 2019 as well as the Board's annual fiscal year orders for FY 2018 and FY 2019.

**Table 2: Note production**

	2018 Budget (000s)	2018 Forecast (000s)	Variance 18F to 18B		2019 Budget (000s)	Variance 19B to 18F		Variance 19B to 18B	
			Amount (000s)	Percent		Amount (000s)	Percent	Amount (000s)	Percent
<b>Calendar year print budget</b>	<b>7,918,000</b>	<b>7,984,000</b>	<b>66,000</b>	<b>0.8</b>	<b>7,046,400</b>	<b>-937,600</b>	<b>-11.7</b>	<b>-871,600</b>	<b>-11.0</b>
<b>Fiscal year print order</b>	<b>7,404,800</b>	<b>7,404,800</b>	<b>0</b>	<b>N/A</b>	<b>7,046,400</b>	<b>-358,400</b>	<b>-4.8</b>	<b>-358,400</b>	<b>-4.8</b>

### *2018 Budget Performance*

We estimate that 2018 operating expenses will be \$853.1 million, which is \$8.7 million, or 1.0 percent, less than the budgeted amount. The budget underrun is primarily attributable to lower-than-projected costs for transportation of new notes from the BEP to the Reserve Banks, research and development, and the quality assurance program. Currency transportation costs will be less-than-budgeted because the Board budgeted to ship \$20 notes using a mode of transportation that it has historically used, but instead, elected to use a less-expensive mode of transportation.<sup>3</sup> The underrun for research and development efforts is the result of the Board not pursuing some options for new security features because they did not meet the program's requirements. The quality assurance program underrun is attributed to focusing near-term efforts on security development only and delaying planned work on designs for the next family of notes.

### *2019 Budget Request Overview: Currency Production & Transportation*

The proposed printing budget includes \$690.8 million in printing costs, which is \$109.1 million, or 13.6 percent, less than 2018 forecasted expenses. This lower printing budget reflects a CY 2019 decrease of 11.7 percent in the number of notes we have requested the BEP to print in CY 2019. This decrease does not represent a decline in currency demand, but primarily a difference due to timing of BEP deliveries. The printing budget includes \$401.9 million (58 percent) in fixed printing costs and \$288.8 million (42 percent) in variable printing costs.

The proposed budget for currency transportation costs is \$22.5 million, which is \$1.3 million, or 6.0 percent, more than 2018 forecasted expenses. The budget includes the cost of shipping new currency from the BEP to Reserve Banks, of shipping fit and unprocessed currency between Reserve Banks, and of returning currency pallets from the Reserve Banks to the BEP. The majority of the increase is attributable to an increase in armored carrier rates between 2018 and 2019, as specified in the existing multi-year armored carrier contracts. In addition, we have budgeted to issue a larger volume of notes from the BEP to the Reserve Banks in 2019 compared with 2018 because we did not issue all of the notes the BEP produced in 2018<sup>4</sup>.

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<sup>3</sup> In consultation with our Reserve Bank and armored carrier partners, we determined that we could ship \$20 notes using a lower-cost mode of transportation that improved operational efficiency, appropriately mitigated risk, and reduced overall costs.

<sup>4</sup> During 2017, Reserve Bank receipts exceeded staffing and processing capacity, resulting in larger volumes of unprocessed currency. During 2018, Reserve Banks processed that backlog, resulting in larger inventories of fit notes available to them to meet demand, and reducing the number of new notes the Board needed to ship. As a result, we have some excess inventory from 2018 which we plan to ship during 2019.

*2019 Budget Request Overview: Reimbursements for BEP Facility Improvements*

The proposed budget to reimburse BEP for their facility expansion as well as their preliminary studies and contractor expenses in support of a replacement of their Washington, D.C., facility costs is \$210.0 million. In 2018, the BEP entered into an interagency agreement with the Army Corps of Engineers to expand the Fort Worth, Texas, facility. The interagency agreement totaled \$162 million, but the BEP expects to spend \$150 million in 2019, which we have included in the budget. Additionally, in 2019, the BEP expects to enter into an interagency agreement with the General Services Administration (GSA) for \$58 million to cover the costs to conduct surveys, transportation and environmental studies; hire GSA's Construction and Project Management contractors; fund GSA's overhead and service fees; and develop construction bid documents (100 percent design) associated with the BEP's new Washington, D.C., facility, based upon the Program of Requirements effort completed last year. Another \$2 million will be used to cover BEP's costs for five contracted personnel to support the BEP Facility Program Office in the oversight and execution of new facility contract and ensure that all of Currency Program requirements are identified and met.

*2019 Budget Request Overview: Board Programs and BEP Support Costs*

In addition to note production and transportation and BEP facility costs, which together represent nearly 97 percent of the CY 2019 operating budget, funding supports the Board's currency programs related to research and development, annual contributions and management support, quality assurance, counterfeit deterrence, currency education, and other reimbursements to the BEP.

The proposed budget for research and development costs is \$11.8 million, which is \$5.8 million, or 96.7 percent, more than 2018 forecasted expenses.<sup>5</sup> The budget includes: \$4.5 million to continue developing and enhancing a prototype banknote inspection system; \$3.0 million for a design consultant; \$2.6 million for development, testing, and evaluation of new and existing security features; and \$0.7 million to continue funding cognitive and perception studies to help inform decisions about security features and banknote designs. The budget also includes \$1.0 million for the Board's division of Information Technology to develop technical requirements for integrating banknote inspection data into the Board's IT environment.

The proposed annual contributions and management support budget is \$7.1 million, which is \$0.5 million, or 7.7 percent, more than 2018 forecasted expenses. The budget

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<sup>5</sup> The increase in the research and development budget is attributable primarily to reclassifying design consultant work from the quality assurance budget (in 2018) to the research and development budget (in 2019).

includes \$6.6 million to fund annual membership fees for the Central Bank Counterfeit Deterrence Group and the Reproduction Research Center. The budget also includes \$0.5 million for work on technology development, adversarial analysis, expert assessment of candidate materials for bank notes, and development of operational metrics in support of BEP and Board management of bank note development.

The proposed quality assurance budget is \$6.5 million, which is \$6.0 million, or 48.0 percent, less than 2018 forecast expenses. This supports the last year (of two, five-year contracts) of the Currency Quality Assurance (CQA) contract to improve quality processes at the BEP. As part of transitioning CQA work to the BEP, the consultants will facilitate formation of a Board and BEP executive review team to assume responsibilities for CQA-related activities after 2019. This team will also evaluate program performance and develop performance metrics that will result in more operational and cost transparency. The budget reduction relative to the 2018 forecast represents less work needed for CQA activities in its final year as a Board-managed contract and a reallocation of design activities from the CQA budget category to the research and development budget.

The proposed 2019 currency education program budget is \$2.4 million, which is \$0.4 million, or 20.7 percent, more than 2018 forecasted expenses. The budget funds the Board's Currency Education Program (CEP), which aims to protect and maintain confidence in U.S. currency worldwide by providing information on all circulating designs of Federal Reserve notes to the global public and key stakeholder groups. In 2019, the CEP will continue to conduct outreach to domestic and international businesses and retailers, maintain the [uscurrency.gov](http://uscurrency.gov) educational website, and mature the program's youth-focused digital learning tools. The additional funding in 2019 will cover expenses for work by a public relations vendor and for further development of digital resources for [uscurrency.gov](http://uscurrency.gov).

#### *2019 Budget Request Overview: Multi-Cycle Capital*

The proposed 2019 budget includes a multi-cycle capital request of \$3.2 million to support the information technology infrastructure of the automated counterfeit inspection technology included in the research and development budget. This multi-cycle request includes funds to reimburse the Board's Division of Information Technology for capitalized internal software development (\$2.7 million), a capital equipment lease (\$0.4 million), and capital equipment (\$0.1 million) needed for the effort through 2021.