

Department of the Treasury
Bureau of Engraving and
Printing (BEP)

FY 2024

Capital Investment Plan

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Note to Reviewers: Consistent with the corresponding Summary of Capital Investments table, the columns included in the investment tables below are defined as:

- **FY 2022 Actuals** – Total actual obligations
- **FY 2023 Estimated Obligations** – Anticipated obligation from all budgetary resources (i.e., balances from prior years, user fees, and FY 2023 Operating Plan levels).
- **FY 2024 President's Budget** – Requested level reflecting the President's FY 2024 budget submission

Major IT Investments

MES Support

Description:

Support Services to upgrade BEPs IT infrastructure and installation of new or upgraded software to support BEP's core manufacturing and support business processes with an integrated database.

Investment Obligations: (In Millions of \$):

| Type | FY 2022 Actual | FY2023 Estimated Obligations | FY2024 President's Budget | Change in \$ | % Change |
|--|----------------|------------------------------|---------------------------|--------------|----------|
| Sub-Total DME Obligations (Including Internal labor (Govt. FTE)) | 10.07 | 14.26 | 12.11 | -2.15 | -15.09% |
| Sub-Total O&M Obligations (Including Internal Labor (Govt. FTE)) | 12.73 | 13.14 | 13.53 | 0.39 | 2.95% |
| Total Obligations | 22.80 | 27.41 | 25.64 | -1.76 | -6.44% |

Total Obligations and Change in \$ may appear slightly off due to rounding to two decimals

Purpose, Accomplishments, Future Objectives:

BEP has implemented the Manufacturing Execution System (MES) comprised of the previous investments (BEP Enterprise Network) to improve overall management and automation of the BEP's Currency Production and Direct Support processes. This initiative continued to increase the source data that is extracted from manufacturing equipment and improved the functionality of applications through further enhancements. During the second year of this investment, the BEP continued IT integration of new automated presses (e.g., Non – Sequential Large Examining and Printing Equipment (ns-LEPE), (Single Note Inspection (SNI) Inspection Finishing System (IFS), Rotary Press) into the MES solution including establishing bi-directional data feeds for NS-LEPE accountability data; identified use cases for artificial intelligence (AI) solutions and established an AI governance structure; upgraded MSS Interfaces to comply with TIER Reporting and DATA Act reporting requirements; streamlined Budget formulation to help reduce manual data entry and track budget approvals; enhanced the advance

analytics model to predict processing lead times for purchasable inventory and support Supply Chain Management with inventory management optimization; developed the next generation MES architectures to improve system interoperability and performance; implemented data and analytics self-service capabilities that will improve end-user data literacy and improve self-generated reporting; added single sign on capability to Identity Management; and established a self-service knowledge management portal that enables end-users to train or retrain on MES applications at their own time and pace.

This investment will continue to improve data consistency, transparency, and accountability by providing BEP end-users with enhanced functionality. Some of the objectives of this investment are the establishment of standard user profiles in the Identify Management System that will accelerate user access to applications they need to do their jobs; Upgrading the Enterprise Service Bus to improve cybersecurity posture and improve data exchanges between applications; Mobile advancements with Supply Chain Management; Architectural Planning for Data Center Migration to New DC Facility (DCF) and initiate deployment of AI/ML technologies to support achievement of enterprise-wide strategic and operational goals.

Major Non-IT Investments

Currency Production

Description:

Currency Production is a multi-year refresh effort to retool its manufacturing processes with state-of-the-art intaglio printing presses, electronic inspection systems, and finishing equipment. To ensure that BEP will meet the annual currency order, the FRB and BEP developed short-, medium-, and long-term strategic equipment replacement plans for the U.S. Currency Program.

Investment Obligations: (In Millions of \$):

| Type | FY 2022 Actual | FY2023 Estimated Obligations | FY2024 President's Budget | Change in \$ | % Change |
|--|----------------|------------------------------|---------------------------|--------------|----------|
| Sub-Total DME Obligations (Including Internal labor (Govt. FTE)) | 36.63 | 105.12 | 181.93 | 76.81 | 73.07% |
| Sub-Total O&M Obligations (Including Internal Labor (Govt. FTE)) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00% |
| Total Obligations | 36.63 | 105.12 | 181.93 | 76.81 | 73.07% |

Total Obligations and Change in \$ may appear slightly off due to rounding to two decimals

Purpose, Accomplishments, Future Objectives:

Currency Production is a multi-year refresh effort to retool its manufacturing processes with state-of-the-art intaglio printing presses, electronic inspection systems, and finishing equipment. To ensure BEP meets the annual currency order, the FRB and BEP developed short-, medium-, and long-term strategic equipment replacement plans for the U.S. Currency Program. Successful implementation of advanced technology improves productivity, reduces environmental impact, and enhances counterfeit

deterrence of U.S. currency notes. The performance of this investment will be evaluated through the following two measures:

1. Comparison of productivity of new equipment with existing equipment.
2. Comparison of spoilage rates of new equipment with rates of existing equipment.

FY 2023 major projects include:

- Non-Sequential LEPE
 - Acquisition of two Non-sequential Large Examining and Printing Equipment (ns-LEPE) for Western Currency Facility (WCF) and one ns-LEPE for DCF.
 - NS-LEPEs are capable of manufacturing larger sheet sizes allowing 50 versus 32 notes on each sheet. This provides additional production capability.
- New DCF Offset Presses
 - The new offset presses are expected to be delivered/installed on a yearly basis, corresponding with delivery/installation of new intaglio presses and other required equipment. Additional presses are also expected to be purchased for the existing WCF to complete and update their production line to support Catalyst family banknote production needs.
- New DCF Foil Machines
 - This requirement provides production machines to apply hot foil features onto Catalyst designs, initial system for WCF and DCF.

FY 2024 major projects include continuing the Physical Vapor Deposition (PVD) chrome projects and:

- 100 Finishing Line (Single Note Inspection (SNI))
 - Acquisition of \$100 Finishing Lines for both facilities. New line to include one (1) Numbering Letterpress (NL) and one (1) Cutting-Inspection-Packaging (C-SNI-P) machine for each facility.
 - New process will overprint serial numbers and seals in sheet format. Sheets will then be processed on Cutting-Inspection-Packaging machine that will sort individual notes by inspection results. Existing Banknote Processing System (BPS) machinery will be used as part of the new finishing line; two (2) C-SNI-P machines are required to support one (1) NL.
- LEPE Upgrades
 - Represents upgrades to the 3 LEPE systems (2 WCF & 1 DCF) to replace obsolete components, improve performance and reliability, and to incorporate improvements from the ns-LEPE systems.
- New DCF Foil Machines
 - To acquire production machines to apply hot foil features

DC Replacement Facility

Description:

Construction of a new, more efficient currency production facility to replace aging infrastructure at the BEP's current Washington, DC facility to achieve increased efficiencies and reduced annual operating costs.

Investment Obligations: (In Millions of \$):

| Type | FY 2022 Actual | FY2023 Estimated Obligations | FY2024 President's Budget | Change in \$ | % Change |
|--|----------------|------------------------------|---------------------------|--------------|-----------|
| Sub-Total DME Obligations (Including Internal labor (Govt. FTE)) | 11.77 | 25.96 | 1,243.70 | 1,217.74 | 4,691.38% |
| Sub-Total O&M Obligations (Including Internal Labor (Govt. FTE)) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00% |
| Total Obligations | 11.77 | 25.96 | 1,243.70 | 1,217.74 | 4,691.38% |

Total Obligations and Change in \$ may appear slightly off due to rounding to two decimals

Purpose, Accomplishments, Future Objectives:

Construction of a new more efficient currency production facility to replace the aging infrastructure at the BEP's current Washington, D.C. facility will achieve increased efficiencies and reduced annual operating costs. The existing BEP currency production facility in Washington, D.C. (DCF) is comprised of two multi-level, multi-wing buildings - the Main building and Annex building. Both buildings, constructed in the early 1900's, are costly to maintain and are obsolete in relation to modernized currency printing technology. The current building layout results in increased time, cost and spoilage for delivery, transport and storage of raw materials and inventories of currency products throughout the manufacturing process. The aging infrastructure exposes the DCF to vulnerabilities related to potential failures and inefficiencies of facility systems, such as HVAC, electrical and plumbing; code compliance; physical and product security.

BEP is conducting a suitability assessment of the site in Beltsville, MD with the support from the U.S. Army Corps of Engineers. A replacement facility will save an estimated \$568 million over 10 years, as compared to the cost of the renovation of the existing facility. In addition, BEP will reduce its annual operating costs by at least \$38 million through production, material handling, and other operational/support efficiencies.

In FY 2022, BEP obligated \$11.8 million in support of the early site development construction. In FY 2023, BEP obligated \$26 million for demolition contract and other site development. The remaining cost estimate for the DC Replacement Facility was revised based on ongoing United States Army Corps of Engineers (USACE) market research. The initial anticipated obligation of \$897 million was revised to an anticipated FY 2024 obligation of \$1.24 billion for the next phase of the replacement facility project.

Facilities Support

Description:

BEP maintains the District of Columbia Facility (DCF) and the Western Currency Facility (WCF). BEP occupies/uses these facilities (owned by the Treasury Department) and is responsible for maintenance/repairs of all buildings and land improvements.

Investment Obligations: (In Millions of \$):

| Type | FY 2022 Actual | FY2023 Estimated Obligations | FY2024 President's Budget | Change in \$ | % Change |
|--|----------------|------------------------------|---------------------------|--------------|----------|
| Sub-Total DME Obligations (Including Internal labor (Govt. FTE)) | 5.11 | 39.67 | 11.95 | -27.73 | -69.89% |
| Sub-Total O&M Obligations (Including Internal Labor (Govt. FTE)) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00% |
| Total Obligations | 5.11 | 39.67 | 11.95 | -27.73 | -69.89% |

Total Obligations and Change in \$ may appear slightly off due to rounding to two decimals

Purpose, Accomplishments, Future Objectives:

BEP maintains the DCF and the WCF and is responsible for maintenance and repairs of all buildings and land improvements while the Treasury Department maintains ownership of these facilities. The facilities house manufacturing equipment, manufacturing and information technologies, equipment and human resources used to support the manufacture of United States Currency and other secure printing documents.

In FY 2022, Facilities Support consisted of major projects supporting both WCF and DCF. Major projects included Switchgear replacement, Central Plant Cooling Tower Refurbishment, Plate Printing Subsurface containment redesign, and Air Handler Refurbishment.

In FY 2023, major facility projects for DCF include the Office of Currency Manufacturing (OCM) Renovation & Work-In-Progress (WIP) Storage, which provides more efficient improved process flows and additional space for WIP storage. DCF support also includes switchgear replacement for the main building, the gears are 35 years old and in need of immediate replacement. WCF major projects include the Air Handler Refurbishment, Air and Vacuum pump upgrade, Building automation system upgrades, Solar/Renewable Energy project and Pre-wipe Tank Replacement. In addition, WCF is securing a New Federal Reserve Vault Automated Racking System, an additional Pre-wipe Tank Replacement, and Offset Plant Chiller upgrades.

In FY 2024, major projects include the continuations of DCF's OCM Renovation & WIP Storage Space, install of new Regenerative Thermal Oxidizer (RTO), and an additional Switchgear Replacement for the main building. WCF's major projects include Air Handler Refurbishment, Building automation system upgrades, Electrical Substations and Safety Upgrades as well as Parking Lot/Perimeter Road Repairs.

Manufacturing Support

Description:

To purchase equipment to support the manufacturing of U.S. currency.

Investment Obligations: (In Millions of \$):

| Type | FY 2022 Actual | FY2023 Estimated Obligations | FY2024 President's Budget | Change in \$ | % Change |
|--|----------------|------------------------------|---------------------------|--------------|----------|
| Sub-Total DME Obligations (Including Internal labor (Govt. FTE)) | 6.81 | 29.64 | 9.82 | -19.83 | -66.89% |
| Sub-Total O&M Obligations (Including Internal Labor (Govt. FTE)) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00% |
| Total Obligations | 6.81 | 29.64 | 9.82 | -19.83 | -66.89% |

Total Obligations and Change in \$ may appear slightly off due to rounding to two decimals

Purpose, Accomplishments, Future Objectives:

The purpose of this project is to support the manufacturing of U.S. currency. It is a multi-year project replacing older, fully depreciated manufacturing support equipment at both of BEP's facilities. Replacing out-of-date equipment on a regular basis allows BEP to be more cost effective and efficient in meeting customer requirements for the production of currency notes. New manufacturing support equipment is typically more energy efficient, eco-friendly and reduces machine down time. In addition, new support equipment acquired by BEP has the technical capability of producing the next generation of advanced counterfeit deterrence features for future design enhancements. The performance of this investment will be evaluated through the following two measures: 1. Comparison of productivity of new equipment with existing equipment. 2. Comparison of spoilage rates of new equipment with rates of existing equipment.

FY 2022 major investments include pallets for currency movement and initial funding for the Jogger/aerator used to prepare sheets for automatic feeding in BEP print and inspect operations. FY 2023 includes E-material Online Inspection Equipment which feature state-of-the-art technologies that will improve the expected lifespan of the light source and other key components of the units thereby ensuring the reliability and accurateness of the units. FY 2023 also includes CTO Equipment upgrades needed to upgrade the existing OptiNota (Printing Press) H with inline UV curing capability for hot foil security features. This investment will also continue through FY 2024.

Security & Accountability

Description:

Security and Accountability improvement projects include surveillance, security and infrastructure upgrades to Washington, D.C., and Western Currency facilities.

Investment Obligations: (In Millions of \$):

| Type | FY 2022 Actual | FY2023 Estimated Obligations | FY2024 President's Budget | Change in \$ | % Change |
|--|----------------|------------------------------|---------------------------|--------------|----------|
| Sub-Total DME Obligations (Including Internal labor (Govt. FTE)) | 1.08 | 11.96 | 1.97 | -9.99 | -83.51% |
| Sub-Total O&M Obligations (Including Internal Labor (Govt. FTE)) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00% |
| Total Obligations | 1.08 | 11.96 | 1.97 | -9.99 | -83.51% |

Total Obligations and Change in \$ may appear slightly off due to rounding to two decimals

Purpose, Accomplishments, Future Objectives:

Security and Accountability improvement projects include surveillance, security and infrastructure upgrades to Washington and Western Currency facilities. BEP did not fund any Security and Accountability investments in FY 2022. In FY 2023, BEP's security and accountability improvements include Unarmed Officers for Closed Circuit Television and DCF/WCF Radio System Upgrades. FY 2024 projects include a modernization of WCF Cameras and Infrastructure and additional funding for unarmed officers for closed circuit television.

WCF Facility Expansion

Description:

A proposed expansion to the Western Currency Facility (WCF) in Fort Worth, TX, adding about 250,000 square feet of new space, to support additional production capabilities required for the accelerated currency redesign of the \$5, \$10 and \$20 notes.

Investment Obligations: (In Millions of \$):

| Type | FY 2022 Actual | FY2023 Estimated Obligations | FY2024 President's Budget | Change in \$ | % Change |
|--|----------------|------------------------------|---------------------------|--------------|----------|
| Sub-Total DME Obligations (Including Internal labor (Govt. FTE)) | 13.00 | 8.40 | 0.00 | -8.40 | -100.00% |
| Sub-Total O&M Obligations (Including Internal Labor (Govt. FTE)) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00% |
| Total Obligations | 13.00 | 8.40 | 0.00 | -8.40 | -100.00% |

Total Obligations and Change in \$ may appear slightly off due to rounding to two decimals

Purpose, Accomplishments, Future Objectives:

This project is an expansion to the Western Currency Facility (WCF) in Fort Worth, TX. The expansion will add approximately 250,000 square feet to the existing facility which will accommodate additional production capabilities to support the next family of currency design, including space for up to five Hot Foil presses, two LEPEs, tactile feature equipment, undefined future production machineries, reclamation efforts, new plating line, additional vault/ WIP space, enclosed truck cells, production support, and central utility plant upgrade. The expansion will include structural enhancements to provide better protection against severe weather and possible security threats. The scope includes the security-related requirements and construction of an additional parking area to accommodate increased staffing necessary for the new equipment.

In FY 2023, the budget included an anticipated \$8.4 million for Supervision, Inspection & Overhead labor to complete the construction project to include a contingency based on the risk associated with the remaining critical components of the expansion facility. These components include electrical/security integration, equipment commissioning, and unforeseen conditions/constructability. There are currently no additional funds forecasted for FY 2024 for the WCF Facility Expansion.