# Bureau of Engraving and Printing

FY 2017 Capital Investment Plan **Investment Name:** Consolidated Facility Improvements

**Type of Investment:** Major Non-IT Investment

#### **Description:**

The consolidated facility improvement projects include minor office renovations and structural upgrades to the Washington, DC and Fort Worth, TX facilities.

#### **Investment Anticipated Outlay: (In Millions of \$):**

Туре	PY-1 and Prior	PY 2015	CY 2016	BY 2017	BY+1 2018	BY+2 2019	BY+3 2020	BY+4 and Beyond	Total
DME Sub Total (Including Gov FTE) Costs		8.78	5.21	9.15					23.13
Total DME funding		8.78	5.21	9.15					23.13
Unallocated DME funding									
O&M Sub Total (Including Gov FTE) Costs									
Total O&M funding									
Unallocated O&M funding									
Total Cost (Including Gov FTE)		8.78	5.21	9.15					23.13
Total Gov FTE Cost		8.78	5.21	9.15					23.13
Number of FTE represented by costs									

#### **Summary of Purpose, Goals, and Benefits:**

Consolidated facility improvement projects include minor renovations, safety and structural upgrades to BEP facilities. The performance of this investment will be evaluated through the following measure: Comparison of the workflows before and after project completion.

#### **Return on Investment:**

The anticipated benefit(s) of the investment: 1. Improve safety 2. Reduce environmental hazards 3. Increase efficiencies.

#### **Requirements/ Benefits/ Mandates:**

Legislative Mandate: N/A

Audit Finding or Material Weakness: N/A

Agency Strategic Plan / Annual Performance Plan: N/A

Presidential Priority: N/A Other Requirement: N/A

#### **Accomplishments and Future Objectives:**

FY16 Award design; FY 17 Construction.

**Investment Name:** Currency Sheet Accountability System

Type of Investment: Major Non-IT Investment

#### **Description:**

This investment will develop accountability for currency sheets from start to finish in the currency manufacturing process. The systems will be outfitted with the necessary sensing equipment to track individual sheets of currency paper upon delivery to Federal Reserve Bank.

#### **Investment Anticipated Outlay: (In Millions of \$):**

Туре	PY-1 and Prior	PY 2015	CY 2016	BY 2017	BY+1 2018	BY+2 2019	BY+3 2020	BY+4 and Beyond	Total
DME Sub Total (Including Gov FTE) Costs			6.00	9.00	9.00				24.00
Total DME funding			6.00	9.00	9.00				24.00
Unallocated DME funding									
O&M Sub Total (Including Gov FTE) Costs									
Total O&M funding									
Unallocated O&M funding									
Total Cost (Including Gov FTE)			6.00	9.00	9.00				24.00
Total Gov FTE Cost									
Number of FTE represented by costs									

#### **Summary of Purpose, Goals, and Benefits:**

The purpose of this investment is to develop an automated currency sheet accountability system on one production line at the Washington, DC facility to evaluate operational and interface requirements for potential full-deployment of a sheet accountability system on all production lines. A currency automated sheet accountability system would replace a manual process and provide BEP with the capability to electronically track and account for currency sheets throughout the production process, from blank sheets to finished notes. Implementing this system would afford BEP better control and accountability of printed and unprinted sheets on the production floor, and it would eliminate sheet count variances that sometime occur between production steps.

Performance will be measured and evaluated by tying consumables to specific sheets and individual notes via serial number.

#### **Return on Investment:**

Anticipated benefit(s) of the investment:

- 1. Security and accountability enhancement,
- 2. Comprehensive quality control and tracking of production,
- 3. Full sheet and note counting verified at each production step, and
- 4. Real time data to assist in decision making.

#### **Requirements/ Benefits/ Mandates:**

Legislative Mandate: N/A

Audit Finding or Material Weakness: N/A

Agency Strategic Plan / Annual Performance Plan: N/A

**Presidential Priority:** N/A **Other Requirement:** N/A

**Investment Name:** Implementation & Enhancements

Type of Investment: Major IT Investment

#### **Description:**

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

#### **Investment Anticipated Outlay: (In Millions of \$):**

Туре	PY-1 and Prior	PY 2015	CY 2016	BY 2017	BY+1 2018	BY+2 2019	BY+3 2020	BY+4 and Beyond	Total
DME Sub Total (Including Gov FTE) Costs				13.63	10.95	11.28	11.72		47.57
Total DME funding				13.63	10.95	11.28	11.72		47.57
Unallocated DME funding									
O&M Sub Total (Including Gov FTE) Costs				5.85	5.52	5.14	5.29		21.80
Total O&M funding				5.85	5.52	5.14	5.29		21.80
Unallocated O&M funding									
Total Cost (Including Gov FTE)				19.48	16.47	16.42	17.01		69.37
Total Gov FTE Cost									
Number of FTE represented by costs									

#### **Summary of Purpose, Goals, and Benefits:**

BEP has been implementing the BEP Enterprise Network (BEN) initiative. BEN is a comprehensive, technology-centric program focused on systems modernization and business transformations. BEN aims to improve overall management and automation of BEP's Currency Production and Direct Support processes. This initiative involves upgrading BEP's IT infrastructure and installing new or upgraded software functionality to support the Bureau's core manufacturing and support business processes with an integrated database. BEN is built on a Commercial Off-The-Shelf solution that utilizes Oracle's Enterprise Resource Planning (ERP) and contains several customized ERP modules.

#### **Return on Investment:**

This investment initiative enhances the functionality of the five customized application solutions that reduce production costs and improve process efficiencies at the Bureau of Engraving and Printing. These further enhancements benefit the Bureau by enabling near real-time data collection, visibility, and notifications for currency production presses/equipment and related systems. They will also provide additional BEP specific manufacturing and accountability functionality to reduce quality defects, reduce manual processes, increase efficiency, and provide an enterprise view of data and information for improved decision making. A dollar value cannot be put on these benefits but their economic value to the Bureau's quality program and reputation is immeasurable.

#### **Requirements/ Benefits/ Mandates:**

Legislative Mandate: N/A

Audit Finding or Material Weakness: N/A

Agency Strategic Plan / Annual Performance Plan: Updated in next BY17 submission.

Presidential Priority: N/A Other Requirement: N/A

### Accomplishments and Future Objectives:

The previous investments (Manufacturing Support System, Data Management Module, and Manufacturing Execution Console) that this investment replaces, have integrated multiple data source systems to improve data consistency, transparency and accountability, leading to decision making based on more accurate information. These integrated systems have improved workload planning and coordination across the Bureau by providing Senior Executives, Chiefs and Managers with near real time data. This has improved efficiency by reducing the amount of time spent searching for data to support job functions.

Future objectives are to continue to increase the source data that is extracted from manufacturing equipment and improve the functionality of the applications through further enhancements.

**Investment Name:** Manufacturing Support Equipment

Type of Investment: Major Non-IT Investment

#### **Description:**

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

#### **Investment Anticipated Outlay: (In Millions of \$):**

Туре	PY-1 and Prior	PY 2015	CY 2016	BY 2017	BY+1 2018	BY+2 2019	BY+3 2020	BY+4 and Beyond	Total
DME Sub Total (Including Gov FTE) Costs		15.05	21.80	15.25	8.00				60.10
Total DME funding		15.05	21.80	15.25	8.00				60.10
Unallocated DME funding									
O&M Sub Total (Including Gov FTE) Costs									
Total O&M funding									
Unallocated O&M funding									
Total Cost (Including Gov FTE)		15.05	21.80	15.25	8.00				60.10
Total Gov FTE Cost									
Number of FTE represented by costs									

#### **Summary of Purpose, Goals, and Benefits:**

The project is a multi-year project that replaces older, fully-depreciated manufacturing support equipment at both 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 capability of producing next- generation 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.

#### **Return on Investment:**

The anticipated benefit(s) of the investment:

- 1. Produce notes at a lower cost with higher quality
- 2. Enhance counterfeit deterrence
- 3. Improve productivity

#### **Requirements/ Benefits/ Mandates:**

Legislative Mandate: N/A

Audit Finding or Material Weakness: N/A

Agency Strategic Plan / Annual Performance Plan: N/A

Presidential Priority: N/A
Other Requirement: N/A

#### **Accomplishments and Future Objectives:**

FY 2015: Award contract for manufacturing support equipment.

FY 2016: Award contract for and acquisition of manufacturing support equipment.

**Investment Name:** Retooling

Type of Investment: Major Non-IT Investment

#### **Description:**

Retooling is a multi-year project that replaces older, fully depreciated production equipment at both BEP's facilities. Replacing out of date equipment on a regular basis allows BEP to more cost effective and efficient.

#### **Investment Anticipated Outlay: (In Millions of \$):**

Туре	PY-1 and Prior	PY 2015	CY 2016	BY 2017	BY+1 2018	BY+2 2019	BY+3 2020	BY+4 and Beyond	Total
DME Sub Total (Including Gov FTE) Costs		15.72	122.00	111.00					248.72
Total DME funding		15.72	122.00	111.00					248.72
Unallocated DME funding									
O&M Sub Total (Including Gov FTE) Costs		0.36							0.36
Total O&M funding		0.36							0.36
Unallocated O&M funding									
Total Cost (Including Gov FTE)		16.08	122.00	111.00					249.08
Total Gov FTE Cost									
Number of FTE represented by costs									

#### **Summary of Purpose, Goals, and Benefits:**

Retooling is a multi-year project that replaces older, fully-depreciated production equipment at both BEP's facilities. Replacing out of date equipment on a regular basis allows BEP to more cost effective and efficient in meeting customer requirements for the production of currency notes. New equipment is typically more energy efficient, eco-friendly, and machine down-time is reduced. In addition, new 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.

#### **Return on Investment:**

The anticipated benefit(s) of the investment:

- 1. Produce notes at a lower cost with higher quality
- 2. Enhance counterfeit deterrence
- 3. Improve productivity

#### **Requirements/ Benefits/ Mandates:**

Legislative Mandate: N/A

Audit Finding or Material Weakness: N/A

Agency Strategic Plan / Annual Performance Plan: N/A

Presidential Priority: N/A Other Requirement: N/A

## Accomplishments and Future Objectives: FY 2015: 1. Award contract for equipment.

FY 2016: Awards are planned for the following equipment: Intaglio Presses, Large Examining and Printing Equipment (LEPE) and Online Inspection equipment.

FY 2017: Awards are planned in 2017 for the following equipment: for Intaglio Presses LEPE and Online Inspection equipment, cutting and packaging systems, a plating line and Plasterota system, a Cash Pak machine, QED Phase 1, and currency sheet accountability equipment.