

Bureau of Engraving and  
Printing

FY 2018

Capital Investment Plan

*Treasury guidance requires five years of investment data for most IT investments. However, cybersecurity and non-major IT investments are not required to provide this level of detail. In addition, Treasury gives discretion to Bureaus on what level of detail to provide for out-year cost data. Due to this, there is some variability in the presentation of out-year cost estimates in this document.*

**Investment Name:** BEP Armored Vehicles

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

**Description:**

The Bureau of Engraving and printing owns three armored vehicles for use in transporting security products.

**Investment Anticipated Outlay: (\$000,000s):**

Type	2015 and Prior Actual	2016 Actual	2017 Estimated	2018 Estimated	2019 Estimated	2020 Estimated	2021 Estimated	2022 and Beyond Estimated	Total
DME Costs	N/A	0.00	0.00	0.00	N/A	N/A	N/A	N/A	0.00
O&M Costs	N/A	0.00	0.01	0.01	N/A	N/A	N/A	N/A	<b>0.03</b>
<b>Total Costs</b>	<b>N/A</b>	<b>0.00</b>	<b>0.01</b>	<b>0.01</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>0.03</b>

Number of FTE	N/A	0.00	0.00	0.00	N/A	N/A	N/A	N/A	0.00
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**Summary of Purpose, Goals, and Benefits:**

The Bureau of Engraving and Printing (BEP) owns three armored vehicles - two located at the D.C. Facility (DCF) in Washington, D.C. and one at the Western Currency Facility (WCF) in Fort Worth, Texas. The vehicles are used to secure and transport security products and equipment from its facilities to local airports in support of BEP's mission critical law enforcement function. The investments were purchased over 20 years ago; only operations and maintenance funds are required.

**Return on Investment:**

Investment allows the agency to provide security and safe transport of its products.

**Accomplishments and Future Objectives:**

Continue to perform routine maintenance and repairs.

**Performance Evaluation and Metrics:**

Metric Description	Performance Measurement Category Mapping	Measurement Condition	Reporting Frequency	Unit Of Measure	CY Target	Latest Actual Result	Date of Latest Actual Result
Cost per vehicle	Financial Performance	Under target	Annual	Numeric	3500.00		

**Investment Name:** BEP DCF Buildings

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

**Description:**

The BEP occupies and uses buildings (Main and Annex) and land owned by the Department of the Treasury. The BEP is responsible for maintenance and repair of all buildings and land improvements.

**Investment Anticipated Outlay: (\$000,000s):**

Type	2015 and Prior Actual	2016 Actual	2017 Estimated	2018 Estimated	2019 Estimated	2020 Estimated	2021 Estimated	2022 and Beyond Estimated	Total
DME Costs	N/A	0.00	0.00	0.00	N/A	N/A	N/A	N/A	0.00
O&M Costs	N/A	8.50	8.23	8.30	N/A	N/A	N/A	N/A	25.03
<b>Total Costs</b>	<b>N/A</b>	<b>8.50</b>	<b>8.23</b>	<b>8.30</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>25.03</b>

  

Number of FTE	N/A	0.00	0.00	0.00	N/A	N/A	N/A	N/A	0.00
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**Summary of Purpose, Goals, and Benefits:**

Routine maintenance and repair of all buildings and land improvements.

**Return on Investment:**

Keeping up with routine maintenance and repair allows BEP to meet the yearly currency order and support the ongoing retooling initiatives through balanced investment in people, processes, facilities and technology.

**Accomplishments and Future Objectives:**

Continuance of maintenance operations.

**Performance Evaluation and Metrics:**

Metric Description	Performance Measurement Category Mapping	Measurement Condition	Reporting Frequency	Unit Of Measure	CY Target	Latest Actual Result	Date of Latest Actual Result
Cost per sq. ft.	Financial Performance	Under target	Quarterly	Numeric	12.00	6.41	05/31/2017

**Investment Name:** BEP WCF Building and Land

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

**Description:**

BEP occupies/uses buildings and land owned by the Department of the Treasury. and is responsible for maintenance/repairs of all buildings and land improvements. The land and building shell for the Western Currency Facility were donated by the City of Fort Worth, TX.

**Investment Anticipated Outlay: (\$000,000s):**

Type	2015 and Prior Actual	2016 Actual	2017 Estimated	2018 Estimated	2019 Estimated	2020 Estimated	2021 Estimated	2022 and Beyond Estimated	Total
DME Costs	N/A	0.00	0.00	0.00	N/A	N/A	N/A	N/A	0.00
O&M Costs	N/A	15.16	14.16	14.73	N/A	N/A	N/A	N/A	44.05
<b>Total Costs</b>	<b>N/A</b>	<b>15.16</b>	<b>14.16</b>	<b>14.73</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>44.05</b>

  

Number of FTE	N/A	0.00	0.00	0.00	N/A	N/A	N/A	N/A	0.00
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**Summary of Purpose, Goals, and Benefits:**

BEP occupies/uses buildings and land owned by the Department and is responsible for maintenance/repairs of all buildings and land improvements. The land and building shell for the WCF were donated by the City of Fort Worth, Texas to the Department, which holds the title. The facility houses manufacturing equipment, manufacturing and information technologies, equipment and human resources used to support the manufacture of United States Currency and other secure printing documents.

**Return on Investment:**

Allow agency to meet the yearly currency order and support the ongoing retooling initiatives, to achieve overall excellence and customer satisfaction through balanced investment in people, processes, facilities and technology.

**Accomplishments and Future Objectives:**

Continued performance of maintenance and repair in FY 2017. WCF Facility Expansion – FY 2017.

**Performance Evaluation and Metrics:**

<b>Metric Description</b>	<b>Performance Measurement Category Mapping</b>	<b>Measurement Condition</b>	<b>Reporting Frequency</b>	<b>Unit Of Measure</b>	<b>CY Target</b>	<b>Latest Actual Result</b>	<b>Date of Latest Actual Result</b>
Cost per sq. ft.	Financial Performance	Under target	Quarterly	Numeric	21.25	5.55	05/31/2017

**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, D.C. and Fort Worth, TX facilities.

**Investment Anticipated Outlay: (\$000,000s):**

Type	2015 and Prior Actual	2016 Actual	2017 Estimated	2018 Estimated	2019 Estimated	2020 Estimated	2021 Estimated	2022 and Beyond Estimated	Total
DME Costs	8.78	5.21	9.15	5.05	N/A	N/A	N/A	N/A	28.18
O&M Costs	0.00	0.00	0.00	0.00	N/A	N/A	N/A	N/A	0.00
<b>Total Costs</b>	<b>8.78</b>	<b>5.21</b>	<b>9.15</b>	<b>5.05</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>28.18</b>

  

Number of FTE	0.00	0.00	0.00	0.00	N/A	N/A	N/A	N/A	0.00
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**Summary of Purpose, Goals, and Benefits:**

Consolidated facility improvement projects include minor renovations, safety and structural upgrades to BEP facilities. These upgrades are necessary for immediate security and safety issues and the DC facility improvements cannot wait until the completion of the new facility.

**Return on Investment:**

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

**Accomplishments and Future Objectives:**

FY 2016 Award design.

FY 2017 Construction.

FY 2018 Construction.

**Performance Evaluation and Metrics:**

Metric Description	Performance Measurement Category Mapping	Measurement Condition	Reporting Frequency	Unit Of Measure	CY Target	Latest Actual Result	Date of Latest Actual Result
Funds Control - Actual capital expenditures versus planned budget	Financial Performance	Under target	Monthly	Percentage	100.00	56.00	05/31/2017

**Investment Name:** DCF Production Facility Replacement

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

**Description:**

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

**Investment Anticipated Outlay: (\$000,000s):**

Type	2015 and Prior Actual	2016 Actual	2017 Estimated	2018 Estimated	2019 Estimated	2020 Estimated	2021 Estimated	2022 and Beyond Estimated	Total
DME Costs	0.00	0.00	0.00	64.00	5.00	5.00	794.00	203.00	1071.00
O&M Costs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total Costs</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>64.00</b>	<b>5.00</b>	<b>5.00</b>	<b>794.00</b>	<b>203.00</b>	<b>1071.00</b>

  

Number of FTE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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**Summary of Purpose, Goals, and Benefits:**

The current BEP currency production facility in Washington, DC (DCF) is comprised of two multi-level, multi-wing buildings - the Main building and Annex building. Both buildings, constructed in the early 1900s, 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 relating to potential facility systems failures and inefficiencies - HVAC, electrical and plumbing; code compliance; physical and product security. The project scope includes construction, production equipment, real estate acquisition, planning and design, furniture /equipment, and relocation. As the existing DCF must continue to operate in order to meet the yearly currency order, the project to renovate and upgrade the existing DCF facilities must begin in FY 2018, in order to be prepared to issue redesigned banknotes on/about 2026. BEP has requested statutory authority to construct a new more efficient facility with a ten-year cost of \$1.071 billion. Without this authority, BEP would have to undertake a much more costly and difficult renovation with a cost of \$1.780 billion over 10 years.

**Return on Investment:**

This investment will provide the following benefits:

- \* Reduce federal footprint by an estimated 28 percent.
- \* Reduced annual O&M costs
- \* Result in lower capital investment versus in-place renovation of current facility.
- \* Improve the quality, productivity and cost effectiveness of the Bureau's core manufacturing processes.
- \* Support the timely manufacture of U.S. Currency in a dependable and predictable manner.

- \* Increase security, safety and storage capacity.
- \* Allow for increased flexibility with technology changes with new security feature designs.

**Accomplishments and Future Objectives:**

Project milestones/timeline will be defined once the land is acquired.

**Performance Evaluation and Metrics:**

Once the legislative proposal to build a new facility in the National Capital Region has been approved, BEP will develop performance metrics for this investment.



**Investment Name:** Integration & 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: (\$000,000s):**

Type	2015 and Prior Actual	2016 Actual	2017 Estimated	2018 Estimated	2019 Estimated	2020 Estimated	2021 Estimated	2022 and Beyond Estimated	Total
DME Costs	0.00	10.19	10.78	8.78	8.55	8.53	N/A	N/A	46.84
O&M Costs	0.00	6.93	8.42	8.18	8.40	8.68	N/A	N/A	40.60
<b>Total Costs</b>	<b>0.00</b>	<b>17.12</b>	<b>19.20</b>	<b>16.96</b>	<b>16.95</b>	<b>17.22</b>	<b>N/A</b>	<b>N/A</b>	<b>87.44</b>

Number of FTE	0.00	0.00	0.00	0.00	0.00	0.00	N/A	N/A	0.00
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**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 will 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 BEP. 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 value to the Bureau's quality program and reputation is immeasurable.

**Accomplishments and Future Objectives:**

The previous investments (Manufacturing Support System, Data Management Module, and Manufacturing Execution Console) that this new investment replaces 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 increasing the source data that is extracted from manufacturing equipment and improve the functionality of the applications through further enhancements.

**Performance Evaluation and Metrics:**

<b>Metric Description</b>	<b>Performance Measurement Category Mapping</b>	<b>Measurement Condition</b>	<b>Reporting Frequency</b>	<b>Unit Of Measure</b>	<b>CY Target</b>	<b>Latest Actual Result</b>	<b>Date of Latest Actual Result</b>
Percentage of BEP Enterprise (BEN) Integrations and Enhancements delivered on time	Customer Satisfaction (Results)	Over target	Monthly	Percentage	100.00		

**Investment Name:** Manufacturing Support Equipment

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

**Description:**

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

**Investment Anticipated Outlay: (\$000,000s):**

Type	2015 and Prior Actual	2016 Actual	2017 Estimated	2018 Estimated	2019 Estimated	2020 Estimated	2021 Estimated	2022 and Beyond Estimated	Total
DME Costs	15.05	21.80	15.25	19.80	N/A	N/A	N/A	N/A	<b>71.90</b>
O&M Costs	0.00	0.00	0.00	0.00	N/A	N/A	N/A	N/A	<b>0.00</b>
<b>Total Costs</b>	<b>15.05</b>	<b>21.80</b>	<b>15.25</b>	<b>19.80</b>	N/A	N/A	N/A	N/A	<b>71.90</b>

Number of FTE	0.00	0.00	0.00	0.00	N/A	N/A	N/A	N/A	0.00
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**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 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.

**Accomplishments and Future Objectives:**

FY 2015: Award contract for manufacturing support equipment.

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

FY 2017: Award contract for Banknote Testing Design Press Lines, Natick Production Replacement Equipment; CTO Lab Equipment Replacement

FY 2018: Award Barcoding RFID implementation; Banknote Test; WCF Plating Line; Notascreen Press.

**Performance Evaluation and Metrics:**

<b>Metric Description</b>	<b>Performance Measurement Category Mapping</b>	<b>Measurement Condition</b>	<b>Reporting Frequency</b>	<b>Unit Of Measure</b>	<b>CY Target</b>	<b>Latest Actual Result</b>	<b>Date of Latest Actual Result</b>
Fund Control - actual capital expenditures versus planned budget.	Financial Performance	Under target	Monthly	Percentage	105.00	23.00	05/31/2017

**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: (\$000,000s):**

Type	2015 and Prior Actual	2016 Actual	2017 Estimated	2018 Estimated	2019 Estimated	2020 Estimated	2021 Estimated	2022 and Beyond Estimated	Total
DME Costs	15.72	18.60	87.62	58.67	N/A	N/A	N/A	N/A	180.61
O&M Costs	0.36	0.00	0.00	0.00	N/A	N/A	N/A	N/A	0.36
<b>Total Costs</b>	<b>16.08</b>	<b>18.60</b>	<b>87.62</b>	<b>58.67</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>180.97</b>

  

Number of FTE	0.00	0.00	0.00	0.00	N/A	N/A	N/A	N/A	0.00
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**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
4. Accomplish the accelerated redesign of \$5, \$10 and \$20 notes.

**Accomplishments and Future Objectives:**

FY 2017: Awards are planned in FY 2017 for the following equipment: Intaglio Presses, Large Examining and Printing Equipment (LEPE), Online Inspection equipment, cutting and packaging systems, a plating line and Plasterota system, a Cash Pak machine, QED Phase1, and currency sheet accountability equipment.

FY 2018: Awards are planned in FY 2018 for the following equipment: LEPE, \$100 Product Line, Hot Foil Lamination machines, OCIS Inspection upgrade, and QED-2 development.

**Performance Evaluation and Metrics:**

<b>Metric Description</b>	<b>Performance Measurement Category Mapping</b>	<b>Measurement Condition</b>	<b>Reporting Frequency</b>	<b>Unit Of Measure</b>	<b>CY Target</b>	<b>Latest Actual Result</b>	<b>Date of Latest Actual Result</b>
Funds Control - Actual capital expenditures versus planned budget	Financial Performance	Under target	Monthly	Percentage	105.00	70.00	05/31/2017

**Investment Name:** WCF Facility Expansion

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

**Description:**

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

**Investment Anticipated Outlay: (\$000,000s):**

Type	2015 and Prior Actual	2016 Actual	2017 Estimated	2018 Estimated	2019 Estimated	2020 Estimated	2021 Estimated	2022 and Beyond Estimated	Total
DME Costs	0.00	0.00	7.50	48.00	58.00	N/A	N/A	N/A	113.50
O&M Costs	0.00	0.00	0.00	0.00	0.00	N/A	N/A	N/A	0.00
<b>Total Costs</b>	<b>0.00</b>	<b>0.00</b>	<b>7.50</b>	<b>48.00</b>	<b>58.00</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>113.50</b>

  

Number of FTE	0.00	0.00	0.00	0.00	0.00	N/A	N/A	N/A	0.00
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**Summary of Purpose, Goals, and Benefits:**

This project is a proposed 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 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/work-in process (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.

**Return on Investment:**

This investment will provide the following benefits:

- \* Provide high quality, secure currency required by the Federal Reserve Board and the United States Secret Service in a timely and cost-effective manner.
- \* Improve the performance of U.S. Currency notes to function flawlessly in commerce.
- \* Improve the quality, productivity and cost effectiveness of the Bureau's core manufacturing processes.
- \* Support the timely manufacture of U.S. Currency in a dependable and predictable manner.
- \* Increase WIP storage space.
- \* Allow for an efficient phased approach to the replacement of aging equipment and introduction of new processes.

**Accomplishments and Future Objectives:**

FY 2017 - Entered into interagency agreement with U. S. Army Corp of Engineers for AE design

FY 2018 - Construction

FY 2019 - Construction

**Performance Evaluation and Metrics:**

<b>Metric Description</b>	<b>Performance Measurement Category Mapping</b>	<b>Measurement Condition</b>	<b>Reporting Frequency</b>	<b>Unit Of Measure</b>	<b>CY Target</b>	<b>Latest Actual Result</b>	<b>Date of Latest Actual Result</b>
Fund Control - actual capital expenditures versus planned budget.	Customer Satisfaction (Results)	Under target	Monthly	Percentage	100.00	2.00	05/31/2017