United States Government Notes to the Financial Statements for the Fiscal Years Ended September 30, 2018, and 2017

Note 1. Summary of Significant Accounting Policies

A. Reporting Entity

The government includes the executive branch, the legislative branch, and the judicial branch. This *Financial Report* includes the financial status and activities related to the operations of the government. SFFAS No. 47, *Reporting Entity*, effective for fiscal year 2018, provides criteria for identifying organizations that are included in the *Financial Report* as "consolidation entities" and "disclosure entities." Consolidation entities are consolidated into the government's financial statements. For disclosure entities, information is disclosed in the notes to the financial statements concerning (a) the nature of the federal government's relationship with the disclosure entities, (b) the nature and magnitude of relevant activity with the disclosure entities during the period and balances at the end of the period, and (c) a description of financial and non-financial risks, potential benefits and, if possible, the amount of the federal government's exposure to gains and losses from the past or future operations of the disclosure entity or entities.

Disclosure entities have a greater degree of autonomy than consolidation entities. Disclosure entities may maintain a separate legal identity, have a governance structure that vests most decision-making authorities in a governing body to insulate the organization from political influence, and/or have relative financial independence. These entities may include, but are not limited to, quasi-governmental and/or financially independent entities and organizations owned and/or controlled by the federal government as a result of (a) regulatory actions (such as organizations in receivership or conservatorship) or (b) other federal government intervention actions if the relationship with such entities is not expected to be permanent.

SFFAS No. 47 also provides guidance for identifying related parties and in determining what information to provide about related party relationships of such significance that it would be misleading to exclude such information. (See Appendix A—Reporting Entity, for a more detailed discussion.)

Based on the criteria in GAAP for federal entities, the assets, liabilities, and results of operations of Fannie Mae and Freddie Mac are not consolidated into the government's consolidated financial statements. However, the values of the investments in such entities, changes in value, and related activity with these entities are included in the government's consolidated financial statements. Although federal investments in Fannie Mae and Freddie Mac are significant, these entities do not meet the GAAP criteria for consolidation entities.

For fiscal year 2018, under SFFAS No. 47 criteria, Fannie Mae and Freddie Mac were owned or controlled by the federal government as a result of (a) regulatory actions (such as organizations in receivership or conservatorship) or (b) other federal government intervention actions. Under the regulatory or other intervention actions, the relationship with the federal government is not expected to be permanent. These entities are classified as disclosure entities based on their characteristics as a whole. For fiscal year 2017, these entities met the criteria of paragraph 50 of Statement of Federal Financial Accounting Concepts (SFFAC) No. 2, *Entity and Display* and do not appear in the federal budget section "Federal Programs by Agency and Account." SFFAS No. 47 replaced reporting entity criteria in SFFAC No. 2 (see Note 25—Disclosure Entities and Related Parties for additional information on these disclosure entities).

Also, under GAAP criteria, the FR System is not consolidated into the government's consolidated financial statements (see Note 25—Disclosure Entities and Related Parties for further information concerning the Federal Reserve System).

Implementation of SFFAS No. 47, as of October 1, 2017, did not have a significant impact on the composition of the entities consolidated in the *Financial Report* as compared to entities consolidated under SFFAC No. 2, for fiscal year 2017 (see Note 1.S—Adjustments to Beginning Net Position for information on the changes in accounting principles). For further information regarding Reporting Entity, see Appendix A—Reporting Entity.

B. Basis of Accounting and Revenue Recognition

Consolidated Financial Statements

The consolidated financial statements of the government were prepared using GAAP, primarily based on Federal Accounting Standards Advisory Board's (FASAB's) SFFAS. Intragovernmental transactions are eliminated in consolidation, except as described in the Other Information– Unmatched Transactions and Balances. See Note 1.R—Unmatched Transactions and Balances for detailed information. The consolidated financial statements include accrual-based financial statements and sustainability financial statements, which are discussed in more detail below, and the related notes to the consolidated financial statements. Collectively, the accrual-based financial statements, the sustainability financial statements, and the notes represent basic information that is deemed essential for the financial statements and notes to be presented in conformity with GAAP.

Accounting standards allow certain presentations and disclosures to be modified, if needed, to prevent the disclosure of classified information. Accordingly, modifications may have been made to certain presentations and disclosures.

Accrual-Based Financial Statements

The accrual-based financial statements were prepared under the following principles:

- Expenses are generally recognized when incurred.
- Non-exchange revenue, including taxes, duties, fines, and penalties, are recognized when collected and adjusted for the change in net measurable and legally collectible amounts receivable (modified cash basis). Related refunds and other offsets, including those that are measurable and legally payable, are netted against non-exchange revenue.
- Exchange (earned) revenue is recognized when the government provides goods and services to the public for a price. Exchange revenue includes user charges such as admission to federal parks and premiums for certain federal insurance.

The basis of accounting used for budgetary purposes, which is primarily on a cash basis (budget deficit) and follows budgetary concepts and policies, differs from the basis of accounting used for the financial statements which follow GAAP. See the Reconciliations of Net Operating Cost and Budget Deficit in the Financial Statements section.

Sustainability Financial Statements

The sustainability financial statements were prepared based on the projected present value of the estimated future revenue and estimated future expenditures, primarily on a cash basis, for a 75 year period.[1] They include the SLTFP, covering all federal government programs, and the Statements of Social Insurance and the Statements of Changes in Social Insurance Amounts, covering social insurance programs (Social Security, Medicare, Railroad Retirement, and Black Lung programs). These estimates are based on economic as well as demographic assumptions presented in Notes 22 and 23. The sustainability financial statements are not forecasts or predictions. The sustainability financial statements are designed to illustrate the relationship between receipts and expenditures, if current policy is continued. For this purpose, the projections assume, among other things, that scheduled social insurance benefit payments would continue after related trust funds are projected to be depleted, contrary to current law, and that debt could continue to rise indefinitely without severe economic consequences.

By accounting convention, the Statements of Social Insurance do not include projected general revenues that, under current law, would be used to finance the remainder of the expenditures in excess of revenues for Medicare Parts B and D that is reported in the Statements of Social Insurance. The SLTFP include all revenues (including general revenues) of the federal government.

New Standards Issued in Prior and Current Years and Implemented in Current Year

Beginning in fiscal year 2018, the government implemented, or began to implement, the requirements of new standards for: Reporting Entity, Tax Expenditures, Budget and Accrual Reconciliation, Assigning Assets to Component Reporting Entities, Amending Inter-Entity Cost Provisions, and Classified Activities. The new standards implemented are:

- SFFAS No. 47, *Reporting Entity*. SFFAS No. 47 established principles to identify organizations for which elected officials are accountable. The standard also guides preparers of general purpose federal financial reports (GPFFRs) in determining what organizations to report upon, whether such organizations are considered "consolidation entities" or "disclosure entities," and what information should be presented about those organizations. The standard also requires information to be provided about related party relationships of such significance that it would be misleading

[1] With the exception of the Black Lung program, which has a rolling 25-year projection period that begins on the September 30 valuation date each year.

to exclude information. Note 25— Disclosure Entities and Related Parties has been added to the *Financial Report* to capture additional information required under SFFAS No. 47. Refer to Note 25—Disclosure Entities and Related Parties and Appendix A for detailed information. SFFAS No. 47 became effective in fiscal year 2018.

- SFFAS No. 52, *Tax Expenditures*. SFFAS No. 52 requires certain information on tax expenditures to be included in the *Financial Report* to assist users in understanding the existence, purpose, and impact of tax expenditures. Disclosures within the notes to the financial statements should include a "plain language" definition, examples of types, and a description of how tax expenditures affect non-exchange revenue, tax collections and refunds, as well as whether tax expenditure amounts are presented in the basic financial statements. The MD&A should include a "plain language" definition, the general purpose, and examples of types of tax expenditures. The MD&A should also include information about other factors that may affect tax collections in order to place tax expenditure information in an appropriate context, a description of how tax expenditures are treated for budgetary and financial reporting purposes, and a statement regarding the availability of published information on tax expenditures, such as the Treasury Office of Tax Policy's unaudited annual report on tax expenditures, and how that information can be obtained. SFFAS No. 52 also encourages presentation of tax expenditures as unaudited other information (OI) in the *Financial Report*. SFFAS No. 52 became effective in fiscal year 2018.
- In October 2017, FASAB issued SFFAS No. 53, *Budget and Accrual Reconciliation; Amending SFFAS No. 7, and 24 and Rescinding SFFAS No. 22*. SFFAS No. 53 amends component entity requirements for a reconciliation between budgetary and financial accounting information established by SFFAS No. 7, *Accounting for Revenue and Other Financing Sources and Concepts for Reconciling Budgetary and Financial Accounting*. To increase informational value and usefulness, and to support the governmentwide financial statement reconciling net operating cost to the budget deficit, this Statement provides for the budget and accrual reconciliation (BAR) to replace the statement of financing. The BAR explains the relationship between the entity's net outlays on a budgetary basis and the net cost of operations during the reporting period. The BAR starts with net cost of operations and is adjusted by components of net cost that are not part of net outlays, components of net outlays that are not part of net cost, and other temporary timing differences, which reflect some special adjustments. SFFAS No. 53 is effective in 2019 and early implementation is permitted. During fiscal year 2018, USDA, VA, HHS, HUD, and Millennium Challenge Corporation (MCC) adopted this standard.
- Technical Bulletin (TB) 2017-2, *Assigning Assets to Component Reporting Entities*. TB 2017-2 provides guidance to address areas not directly covered in existing Statements and clarifies existing standards. The TB provides that assets may be assigned by a reporting entity to its component reporting entities on a rational and consistent basis. The TB provides that assets may only be assigned by a component reporting entity to its own sub-component reporting entities (such as bureaus, components, or responsibility segments within the same larger reporting entity or department). This TB facilitates reporting for large and complex organizations so that reporting is better aligned with their operations and results in less costly financial reporting by permitting the reporting entity to align reporting with established funding and governance structures. Component reporting entities should describe the policies used to assign significant assets. This TB also reduces barriers to and cost of adopting GAAP. TB 2017-2 became effective in fiscal year 2018.
- In May 2018, FASAB issued SFFAS No. 55, *Amending Inter-Entity Cost Provisions*. SFFAS No. 55 revises SFFAS No. 4, *Managerial Cost Accounting Standards and Concepts* (including Interpretation 6*, Accounting for Imputed Intra-departmental Costs: An Interpretation of SFFAS No. 4*). SFFAS No. 4 required component reporting entities to recognize the full costs of services received from other federal reporting entities even if there was no requirement to reimburse the providing entity for the full cost of such services. This Statement revises SFFAS No. 4 to provide for the continued recognition of significant inter-entity costs by business-type activities and rescinds the following: a) SFFAS No. 30, *Inter-Entity Cost Implementation: Amending SFFAS No. 4, Managerial Cost Accounting Standards and Concepts* and b) Interpretation 6*, Accounting for Imputed Intra-departmental Costs: An Interpretation of SFFAS No. 4*. Recognition of inter-entity costs by activities that are not business-type activities is not required with the exception of inter-entity costs for personnel benefits and the Treasury Judgment Fund settlements unless otherwise directed by the OMB. Notwithstanding the absence of a requirement, non-business-type activities may elect to recognize imputed cost and corresponding imputed financing for other types of inter-entity costs. Component reporting entities should disclose that only certain inter-entity costs are recognized for goods and services that are received from other federal entities at no cost or at a cost less than the full costs. SFFAS No. 55 is effective in 2019 and early implementation is permitted. During fiscal year 2018, DOD adopted this standard.
- SFFAS No. 56, *Classified Activities*. SFFAS No. 56 permits financial statement modifications that do not affect net results of operations or net position to prevent the disclosure of classified national security information or activities. In addition, this Statement allows a component reporting entity to be excluded from one reporting entity and consolidated into another reporting entity, and the effect of the modification may change the net results of operations

and/or net position. Further, interpretations of this Statement, which may themselves contain classified information, will address the requirements of this and other standards and permit other modifications when needed to prevent the disclosure of classified information. Modifications permitted by this Statement and future interpretations may affect the net results of operations and/or net position of those entities applying the interpretations. This standard may be implemented for fiscal year 2018.

In fiscal year 2016, the government began implementing the requirements of new standards related to the reporting for: Inventories and Related Property and Property, Plant, and Equipment. The standards being implemented are:

- FASAB issued SFFAS No. 48, *Opening Balances for Inventory, Operating Materials and Supplies, and Stockpile Materials.* SFFAS No. 48 permits a reporting entity to apply an alternative valuation method in establishing opening balances and applies when a reporting entity is presenting financial statements or one or more line items addressed by this statement. This standard can be applied for the first time or after a period during which existing systems could not provide the information necessary for producing GAAP-based financial statements without use of the alternative valuation methods. This is intended to provide an alternative method to adoption of GAAP when historical records and systems do not provide a basis for valuation of opening balances in accordance with SFFAS No. 3, *Accounting for Inventory and Related Property.* This application is available to each reporting entity only once per line item addressed in this statement. Reporting entities that meet either condition and elect to apply this statement should follow the guidance in SFFAS No. 21, *Reporting Corrections of Errors and Changes in Accounting Principles.* SFFAS No. 48 was effective beginning in fiscal year 2017. Early implementation was permitted. DOD did partially implement in 2016 and select component entities have continued to implement in 2017 and 2018. DOD has not declared full implementation yet.
- FASAB issued SFFAS No. 50, *Establishing Opening Balances for General Property, Plant and Equipment.* SFFAS No. 50 permits a reporting entity to apply an alternative valuation method in establishing opening balances and applies when a reporting entity is presenting financial statements or one or more line items addressed by this statement. This standard can be applied for the first time or after a period during which existing systems could not provide the information necessary for producing GAAP-based financial statements without use of the alternative valuation methods. This is intended to provide an alternative method to adoption of GAAP when historical records and systems do not provide a basis for valuation of opening balance in accordance with SFFAS No. 6, *Accounting for Property, Plant, and Equipment*. This application is available to each reporting entity only once per line item addressed in this statement. Reporting entities meeting the conditions and electing to apply this statement should follow the guidance in SFFAS No. 21, *Reporting Corrections of Errors and Changes in Accounting Principles.* SFFAS No. 50 was effective beginning in fiscal year 2017. Early implementation was permitted. DOD did partially implement in 2016 and select component entities have continued to implement in 2017 and 2018. DOD has not declared full implementation yet.

New Standards Issued and Not Yet Implemented

FASAB issued the following new standards that are applicable to the *Financial Report*, but are not yet implemented at the governmentwide level for fiscal year 2018:

- In April 2016, FASAB issued SFFAS No. 49, *Public-Private Partnerships Disclosure Requirements.* SFFAS No. 49 establishes principles to ensure disclosure about Public-Private Partnerships (P3s) are presented in the reporting entity's GPFFRs. P3s are defined as "risk sharing" arrangements or transactions lasting more than five years between public and private sector entities. Disclosure requirements comprise quantitative and qualitative information to assist users in understanding the nature of P3s. P3 disclosures help achieve the operating performance and budgetary integrity objectives outlined in SFFAC No. 1. P3s are a form of investments. They should be adequately disclosed in order to assist report users in determining: (a) the important assets of the U.S. government and how effectively they are being managed and (b) the identification of risks. SFFAS No. 49 is effective for periods beginning after September 30, 2018 and early implementation is permitted; however, it is not being early implemented in fiscal year 2018.
- In January 2017, FASAB issued SFFAS No. 51, *Insurance Programs*. SFFAS No. 51 establishes accounting and financial reporting standards to ensure that insurance programs are adequately defined and report consistent information about the liabilities for losses incurred and claimed as well as expected losses during remaining coverage. These will replace the insurance guarantee program standards provided in paragraphs 97-121 of SFFAS No. 5, *Accounting for Liabilities of the Federal Government.* To support consistency, it identifies three categories: 1) exchange transaction insurance programs other than life insurance, 2) non-exchange transaction insurance programs and 3) life insurance programs. Insurance programs are categorized based upon the type of revenue received as defined by SFFAS No. 7, *Accounting for Revenue and Other Financing and Concepts for Reconciling Budgetary and Financial Accounting,* as amended. SFFAS No. 51 provides guidance as to how and when insurance

programs should recognize revenue, expenses and liabilities according to the aforementioned categories. The recognition measurement, and disclosure guidance provides for concise, meaningful and transparent information regarding the operating performance of insurance programs. SFFAS No. 51 is effective for periods beginning after September 30, 2018 and early implementation is not permitted.

- In April 2018, FASAB issued SFFAS No. 54, *Leases: An Amendment of SFFAS No. 5, Accounting for Liabilities of the Federal Government, and SFFAS No. 6, Accounting for Property, Plant, and Equipment*. SFFAS No. 54 revises the financial reporting standards for federal lease accounting. It provides a comprehensive set of lease accounting standards to recognize federal lease activities in the reporting entity's GPFFRs and includes appropriate disclosures. This Statement requires that federal lessees recognize a lease liability and a leased asset at the commencement of the lease term, unless it meets any of the scope exclusions or the definition/criteria of short-term leases, or contracts or agreements that transfer ownership, or intragovernmental leases. A federal lessor would recognize a lease receivable and deferred revenue, unless it meets any of the scope exclusions or the definition/criteria or short-term leases, contracts or agreements that transfer ownership, or intragovernmental leases. SFFAS No. 54 is effective in 2021 and early adoption is not permitted.

C. Accounts and Taxes Receivable

Accounts receivable represent claims to cash or other assets from entities outside the government that arise from the sale of goods or services, duties, fines, certain license fees, recoveries, or other provisions of the law. Accounts receivable are reported net of an allowance for uncollectible amounts. An allowance is established when it is more likely than not the receivables will not be totally collected. The allowance method varies among the entities in the government and is usually based on past collection experience and is reestimated periodically as needed. Methods include statistical sampling of receivables, specific identification and intensive analysis of each case, aging methodologies, and percentage of total receivables based on historical collection.

Taxes receivable consist primarily of uncollected tax assessments, penalties, and interest when taxpayers have agreed or a court has determined the assessments are owed. Taxes receivable do not include unpaid assessments when taxpayers or a court have not agreed that the amounts are owed (compliance assessments) or the government does not expect further collections due to factors such as the taxpayer's death, bankruptcy, or insolvency (write-offs). Taxes receivable are reported net of an allowance for the estimated portion deemed to be uncollectible. The majority of the allowance for uncollectible amounts is based on projections of collectible amounts from a statistical sample of unpaid assessments.

D. Loans Receivable and Loan Guarantee Liabilities

Direct loans obligated and loan guarantees committed after fiscal year 1991 are reported based on the present value of the net cash flows estimated over the life of the loan or guarantee. The difference between the outstanding principal of the direct loans and the present value of their net cash inflows is recognized as a subsidy cost allowance. The present value of estimated net cash flows of the loan guarantees is recognized as a liability for loan guarantees.

The subsidy expense for direct or guaranteed loans disbursed during a fiscal year is the present value of estimated net cash flows for those loans or guarantees. For the fiscal year during which new direct or guaranteed loans are disbursed, the components of the subsidy expense of those new direct loans and loan guarantees are recognized separately among interest subsidy costs, default costs, fees and other collections, and other subsidy costs. Credit programs reestimate the subsidy cost allowance for outstanding direct loans and the liability for outstanding loan guarantees, by taking into account all factors that may have affected the estimated cash flows. Any adjustment resulting from the reestimates is recognized as a subsidy expense (or a reduction in subsidy expense).

Direct loans obligated and loan guarantees committed before fiscal year 1992 are valued under two different methodologies within the government: the allowance-for-loss method and the present-value method. Under the allowance-for-loss method, the outstanding principal of direct loans is reduced by an allowance for uncollectible amounts; the liability for loan guarantees is the amount the entity estimates would more likely than not require future cash outflow to pay default claims. Under the present-value method, the outstanding principal of direct loans is reduced by an allowance equal to the difference between the outstanding principal and the present value of the expected net cash flows. The liability for loan guarantees is the present value of expected net cash outflows due to the loan guarantees.

E. Inventories and Related Property

Inventory is tangible personal property that is (1) held for sale, principally to federal entities, (2) in the process of production for sale, or (3) to be consumed in the production of goods for sale or in the provision of services for a fee. SFFAS No. 3, *Accounting for Inventory and Related Property*, requires inventories held for sale and held in reserve for future sale within the government to be valued using either historical cost or a method that reasonably approximates historical cost. Historical cost methods include first-in-first-out, weighted average, and moving average. Any other valuation method may be used if the results reasonably approximate one of the historical cost methods. FASAB issued additional guidance SFFAS No. 48, which permits a reporting entity to apply an alternative valuation method in establishing opening balances for inventory, OM&S, and stockpile materials and is intended to provide an alternative valuation method when historical records and systems do not provide a basis for valuation of opening balances in accordance with SFFAS No. 3.

As the largest contributor of inventories and related property, DOD values approximately 99 percent of its resale inventory using the moving average cost method as of September 30, 2018. DOD reports the remaining 1 percent of resale inventories at an approximation of historical cost using latest acquisition cost adjusted for holding gains and losses. OM&S are valued using various methods including moving average cost, standard price, historical cost, replacement price, and direct method. DOD uses both the consumption method (expensed when issued to an end user for consumption in normal operations) and the purchase method (expensed when purchased) of accounting for OM&S. Stockpile Materials are accounted for using actual cost or the lower of cost or market method. DOD continues to implement SFFAS No. 48, permitting alternative methods in establishing opening balances.

F. Property, Plant, and Equipment

Property, Plant, and Equipment (PP&E) consists of tangible assets that have an estimated useful life of two or more years, are not intended for sale in the ordinary course of business, and are intended to be used or available for use by the entity. These tangible assets may include land, land rights, assets acquired through capital leases, buildings and structures, furniture and fixtures, equipment, and vehicles.

SFFAS No. 6, *Accounting for Property, Plant, and Equipment* requires general PP&E to be recorded at cost. Cost shall include all costs incurred to bring the PP&E to a form and location suitable for its intended use. PP&E used in government operations are carried at acquisition cost, with the exception of some DOD equipment. FASAB issued additional guidance, SFFAS No. 50, *Establishing Opening Balances for General Property, Plant, and Equipment* which states that a reporting entity may choose alternative methods for establishing an opening balance for land and land rights. The entity may exclude land and land rights from the opening balance of general PP&E. In so doing, future land and land right acquisitions should be expensed. An entity electing to exclude land and land rights from its general PP&E opening balances must disclose, with a reference on the balance sheet to the related disclosure, the number of acres held at the beginning of each reporting period, the number of acres added during the period, the number of acres disposed of during the period, and the number of acres held at the end of each reporting period. DOD generally records PP&E at the estimated historical cost. However, when applicable DOD will continue to adopt SFFAS No. 50.

Costs to acquire PP&E, extend the useful life of existing PP&E, or enlarge or improve its capacity, that exceed federal entities' capitalization thresholds should be capitalized and depreciated or amortized. Depreciation and amortization expense should be recognized on all capitalized PP&E, except land and land rights of unlimited duration. In the case of constructed PP&E, the PP&E shall be recorded as construction work in process until it is placed in service, at which time the balance is transferred to PP&E.

For financial reporting purposes, heritage assets (excluding multi-use heritage assets) and stewardship land are not recorded as part of PP&E. Since heritage assets are intended to be preserved as national treasures, it is anticipated that they will be maintained in reasonable repair and that there will be no diminution in their usefulness over time. Many assets are clearly heritage assets. For example, the National Park Service manages the Washington Monument, the Lincoln Memorial and the Mall. Heritage assets that are predominantly used in general government operations are considered multi-use heritage assets and are included in PP&E. Stewardship land is also consistent with the treatment of heritage assets in that much of the government's land is held for the general welfare of the nation and is intended to be preserved and protected. Stewardship land is land owned by the government but not acquired for or in connection with general PP&E. Because most federal land is not directly related to general PP&E, it is deemed to be stewardship land and accordingly, it is not reported on the Balance Sheet. Examples of stewardship land include national parks and forests. For more details on stewardship assets, see Note 24—Stewardship Land and Heritage Assets.

G. Debt and Equity Securities

Debt and equity securities are classified as held-to-maturity, available-for-sale, and trading. Held-to-maturity debt and equity securities are reported at cost, net of unamortized premiums and discounts. Available-for-sale debt and equity securities are reported at fair value. Trading debt and equity securities are reported at fair value.

H. Investments in Government-Sponsored Enterprises

The senior preferred stock and associated warrants for the purchase of common stock in the GSEs (Fannie Mae and Freddie Mac) are presented at their fair value. Senior Preferred Stock Purchase Agreements (SPSPAs), which Treasury entered into with each GSE when they were placed under conservatorship, can result in payments to the GSEs when, at the end of any quarter, the Federal Housing Finance Agency (FHFA), acting as the conservator, determines that the liabilities of either GSE exceed its respective assets. Such payments result in an increase to the investment in the GSEs' senior preferred stock, with a corresponding decrease to cash held by Treasury.

The valuation to estimate the investment's fair value incorporates forecasts, projections, and cash flow analyses. Changes in valuation, including impairments, are deemed usual and recurring and thus are recorded as exchange transactions on the Statement of Net Cost and investments in GSEs on the Balance Sheet. The government also records dividends related to these investments as exchange transactions and accrues when declared.

The potential liabilities to the GSEs, if any, are assessed annually and recorded at the gross estimated amount. For more detailed information on investments in GSEs, refer to Note 8—Investments in Government-Sponsored Enterprises.

I. Federal Debt

Accrued interest on Treasury securities held by the public is recorded as an expense when incurred, instead of when paid. Certain Treasury securities are issued at a discount or premium. These discounts and premiums are amortized over the term of the security using an interest method for all long-term securities and the straight line method for short-term securities. Treasury also issues Treasury Inflation-Protected Securities (TIPS). The principal for TIPS is adjusted daily over the life of the security based on the Consumer Price Index for all Urban Consumers (CPI-U).

J. Federal Employee and Veteran Benefits Payable

Generally, federal employee and veteran benefits payable are recorded during the time employee services are rendered. The related liabilities for defined benefit pension plans, veterans' compensation, burial and education benefits, post-retirement health benefits, and post-retirement life insurance benefits, are recorded at estimated present value of future benefits, less any estimated present value of future normal cost contributions. Normal cost is the portion of the actuarial present value of projected benefits allocated as an expense for employee services rendered in the current year. Actuarial gains and losses (as well as prior service cost, if any) are recognized immediately in the year they occur without amortization.

VA also provides certain veterans and/or their dependents with pension benefits, based on annual eligibility reviews, if the veteran died or was disabled for nonservice-related causes. The actuarial present value of the future liability for these VA pension benefits is a non-exchange transaction and is not required to be recorded on the Balance Sheet. These benefits are recognized as expenses when benefits are paid rather than when employee services are rendered.

The liabilities for *Federal Employees' Compensation Act* (FECA) benefits are recorded at estimated present value of future benefits for injuries and deaths that have already been incurred.

Gains and losses from changes in long-term assumptions used to estimate federal employee pensions, Other Retirement Benefits (ORB), and Other Postemployment Benefits (OPEB) liabilities are reflected separately on the Statement of Net Cost and the components of the expense related to federal employee pension, ORB, and OPEB liabilities are disclosed in Note 12—Federal Employee and Veteran Benefits Payable as prescribed by SFFAS No. 33, *Pensions, Other Retirement Benefits, and Other Postemployment Benefits: Reporting the Gains and Losses from Changes in Assumptions and Selecting Discount Rates and Valuation Dates*. In addition, SFFAS No. 33 also provides a standard for selecting the discount rate assumption for present value estimates of federal employee pension, ORB, and OPEB liabilities.

K. Environmental and Disposal Liabilities

Environmental and disposal liabilities are recorded at the estimated current cost of the cleanup plan, including the level of restoration to be performed, the current legal or regulatory requirements, and the current technology. Cleanup costs are the costs of removing, containing or disposing of hazardous waste. Hazardous waste is a solid, liquid, or gaseous waste that, because of its quantity or concentration, presents a potential hazard to human health or the environment. Cleanup costs include, but are not limited to, decontamination, decommissioning, site restoration, site monitoring, closure, and post-closure costs. Where technology does not exist to clean up radioactive or hazardous waste, only the estimable portion of the liability (typically monitoring and safe containment) is recorded.

L. Insurance and Guarantee Program Liabilities

Insurance and guarantee programs (such as Federal Crop Insurance Program and Benefit Pension Plans Program) are authorized by law to financially compensate a designated population of beneficiaries by accepting all or part of the risk for losses incurred as a result of an insured event. Programs excluded from this category include social insurance, loan guarantee, and federal employee and veteran benefit programs. Insurance and guarantee program funds are commonly held in revolving funds in the government and losses sustained by participants are paid from these funds. Many of these programs receive appropriations to pay excess claims or have authority to borrow from the Treasury. The values of insurance and guarantee program liabilities are particularly sensitive to changes in underlying estimates and assumptions. Insurance and guarantee programs with recognized liabilities in future periods (i.e., liabilities that extend beyond one year) are reported at their net present value.

M. Deferred Maintenance and Repairs

Deferred maintenance and repairs are maintenance and repairs that were not performed when they should have been or scheduled maintenance and repairs that were delayed or postponed. Maintenance is the act of keeping fixed assets in acceptable condition, including preventative maintenance, normal repairs, and other activities needed to preserve the assets, so they continue to provide acceptable service and achieve their expected life. Maintenance and repairs exclude activities aimed at expanding the capacity of assets or otherwise upgrading them to serve needs different from those originally intended. Deferred maintenance and repairs are not expensed in the Statements of Net Cost or accrued as liabilities on the Balance Sheet. However, deferred maintenance and repairs information is disclosed in the unaudited RSI section of this report. Please see unaudited RSI, Deferred Maintenance and Repairs for additional information including measurement methods.

N. Contingencies

Liabilities for contingencies are recognized on the Balance Sheet when both:

- A past transaction or event has occurred, and
- A future outflow or other sacrifice of resources is probable and measurable.

The estimated contingent liability may be a specific amount or a range of amounts. If some amount within the range is a better estimate than any other amount within the range, then that amount is recognized. If no amount within the range is a better estimate than any other amount, then the minimum amount in the range is recognized and the range and a description of the nature of the contingency is disclosed.

Contingent liabilities that do not meet the above criteria for recognition, but for which there is at least a reasonable possibility that a loss may be incurred, are disclosed in Note 18—Contingencies.

O. Commitments

In the normal course of business, the government has a number of unfulfilled commitments that may require the use of its financial resources. Note 19—Commitments describes the components of the government's actual commitments that are disclosed due to their nature and/or their amount. They include long-term leases, undelivered orders, and other commitments.

P. Social Insurance

A liability for social insurance programs (Social Security, Medicare, Railroad Retirement, Black Lung, and Unemployment) is recognized for any unpaid amounts currently due and payable to beneficiaries or service providers as of the reporting date. No liability is recognized for future benefit payments not yet due. For further information, see Note 22—Social Insurance and the unaudited RSI—Social Insurance section.

Q. Funds from Dedicated Collections

Generally, funds from dedicated collections are financed by specifically identified revenues, provided to the government by non-federal sources, often supplemented by other financing sources that remain available over time. These specifically identified revenues and other financing sources are required by statute to be used for designated activities, benefits, or purposes, and must be accounted for separately from the government's general revenues. The three required criteria for a fund from dedicated collections are:

- A statute committing the government to use specifically identified revenues and/or other financing sources that are originally provided to the government by a non-federal source only for designated activities, benefits, or purposes;
- Explicit authority for the fund to retain revenues and/or other financing sources not used in the current period for future use to finance the designated activities, benefits, or purposes; and
- A requirement to account for and report on the receipt, use, and retention of the revenues and/or other financing sources that distinguishes the fund from the government's general revenues.

For more details on funds from dedicated collections, see Note 20—Funds from Dedicated Collections.

R. Unmatched Transactions and Balances

The reconciliation of the change in net position requires that the difference between ending and beginning net position equals the difference between revenue and cost, plus or minus prior-period adjustments.

The unmatched transactions and balances are needed to bring the change in net position into balance. The primary factors affecting this out of balance situation are:

- Unmatched intragovernmental transactions and balances between federal entities; and
- Errors and restatements in federal entities reporting.

As intragovernmental transactions and balances reduce to immaterial amounts, the corresponding individual lines in the Unmatched Transactions and Balances table are adjusted to remove the differences for the fiscal year. Please refer to the table of Unmatched Transactions and Balances in Other Information (Unaudited) for examples of the individual lines. Materiality for these adjustments is considered in the absolute value, when at or below $0.1 billion.

Refer to the Other Information (unaudited)—Unmatched Transactions and Balances for detailed information.

S. Adjustments to Beginning Net Position

During fiscal years 2017 and 2018, DOD reported adjustments to beginning net position impacting the financial statements. DOD reported a decrease of $2.5 billion and an increase of over $37 billion in fiscal years 2018 and 2017, respectively, to beginning net position due to continuing implementation of SFFAS No. 48, *Opening Balances for Inventory, Operating Materials and Supplies, and Stockpile Materials* and SFFAS No. 50, *Establishing Opening Balances for General Property, Plant, and Equipment*.

SFFAS No. 47, *Reporting Entity,* was implemented in fiscal year 2018. The standard requires that consolidation entities be consolidated in their entirety. Prior to fiscal year 2018, only the federal portion of Smithsonian Institution was consolidated. For fiscal year 2018, all activities (federal and non-federal portions) of Smithsonian Institution were consolidated, resulting in a $2.6 billion adjustment to the fiscal year 2018 beginning net position.

In fiscal year 2017, Note 20—Funds from Dedicated Collections included $0.2 billion in adjustments to beginning net position for Gulf Coast Ecosystem Restoration Council and HUD. In fiscal year 2018, the adjustments to beginning net position for Smithsonian Institution of $2.6 billion related to dedicated collection funds.

T. Reclassifications

Certain fiscal year 2017 amounts were reclassified to conform to the fiscal year 2018 presentation. For example, reclassifications were made to certain line items presented on the Reconciliation of Net Operating Cost and Budget Deficit and the Statement of Changes in Cash Balance from Budget and Other Activities to provide a further breakdown of certain categories of transactions. Also, a review was done to enhance the format and readability of the *Financial Report* leading to consolidation of immaterial lines within tables, removal of information not required by FASAB, and be more in line with entity reporting requirements. In fiscal year 2018, the presentation of Note 4—Loans Receivable and Loan Guarantee Liabilities, Net for fiscal year 2017 was reclassified to mirror entity financial reporting reducing the need for manual calculations. The presentations of Note 5—Inventories and Related Property, Net, Note 6—Property, Plant, and Equipment, Net, and Note 13—Environmental and Disposal Liabilities removed the breakout of DoD for fiscal years 2017 and 2018.

U. Restatements

In fiscal year 2018, HUD recognized material misstatements that were due to (1) a discounting error in the Federal Housing Administration (FHA) cash flow model used to calculate the recovery rate applied to the annual financial statement re-estimate and (2) FHA not accounting for a contingency paid by the Treasury Judgment Fund. The corrections resulted in the restatement of certain prior year amounts reported on the Balance Sheet, Statement of Net Cost, Statement of Operations and Changes in Net Position, Reconciliations of Net Operating Cost and Budget Deficit, Note 4—Loans Receivable and Loans Guarantee Liabilities, Net (understated by $1.7 billion), and Note 16—Other Liabilities (overstated by $0.1 billion).

In fiscal year 2018, HUD made re-estimate presentation changes to subsidy expense (income) ($3.5 billion decrease), principal amount of loans under guarantee ($3.2 billion increase), and principal amount guaranteed by the United States ($2.6 billion increase) presented in Note 4—Loans Receivable and Loans Guarantee Liabilities fiscal year 2017 tables. HUD also changed the presentation of Note 20—Funds from Dedicated Collections from consolidation (includes eliminations) to combined (excludes eliminations) adjusting the ending net position by $0.1 billion in fiscal year 2017.

Also, in fiscal year 2018 errors were noted in the presentation of Note 19—Commitments for undelivered orders and other commitments that required correction of balances reported in fiscal year 2017. The corrections resulted in the restatement of prior year amounts for DOJ's undelivered orders ($13.9 billion increase) and Treasury's all other commitments ($10.8 billion increase).

Fiscal year 2017 beginning net position was restated by $51.2 billion due to compilation errors in the presentation of the Balance Sheet and Note 6—Property, Plant, and Equipment, Net. In addition, the related activity caused a restatement on the Statement of Net Cost in the amount of $1.3 billion.

V. Fiduciary Activities

Fiduciary activities are the collection or receipt, as well as the management, protection, accounting, investment and disposition by the government of cash or other assets in which non-federal individuals or entities have an ownership interest that the government must uphold. Fiduciary cash and other fiduciary assets are not assets of the government and are not recognized on the Balance Sheet. See Note 21—Fiduciary Activities, for further information.

W. Use of Estimates

The government has made certain estimates and assumptions relating to the reporting of assets, liabilities, revenues, expenses, and the disclosure of contingent liabilities to prepare these financial statements. There are a large number of factors that affect these assumptions and estimates, which are inherently subject to substantial uncertainty arising from the likelihood of future changes in general economic, regulatory, and market conditions. As such, actual results will differ from these estimates and such differences may be material.

Significant transactions subject to estimates are included in the balance of loans and credit program receivables, federal employee and veteran benefits payable, credit reform subsidy costs, investments in GSEs, and other non-federal securities and related impairment, tax receivables, loan guarantees, depreciation, imputed costs, other actuarial liabilities, cost and earned revenue allocations, as well as contingencies and any related recognized liabilities.

The government recognizes the sensitivity of credit reform modeling to slight changes in some model assumptions and uses regular review of model factors, statistical modeling, and annual reestimates to reflect the most accurate cost of the credit programs to the U.S. government. *Federal Credit Reform Act of 1990* (FCRA) loan receivables and loan guarantees are disclosed in Note 4—Loans Receivable and Loan Guarantee Liabilities, Net.

The forecasted future cash flows used to determine credit reform amounts are sensitive to slight changes in model assumptions, such as general economic conditions, specific stock price volatility of the entities in which the government has an equity interest, estimates of expected default, and prepayment rates. Therefore, forecasts of future financial results have inherent uncertainty.

The annual valuation performed as of September 30 on the senior preferred stock and warrants comprising the Investments in GSEs line item on the Balance Sheets incorporates various forecasts, projections, and cash flow analyses to develop an estimate of the asset's fair value. The value of the senior preferred stock is estimated by first estimating the fair value of the total equity of each GSE (which, in addition to the senior preferred stock, is comprised of other equity instruments including common stock, common stock warrants, and junior preferred stock). The fair value of the total equity is based on a discounted cash flow valuation methodology, whereby the primary input is the present value of the projected quarterly dividend payments. The fair value of the GSEs' other equity instruments are then deducted from its total equity, with the remainder representing the fair value of the senior preferred stock. The primary input into the warrants valuation is the market value of the shares of common stock of the GSEs which, along with the junior preferred stock, are traded on the over-the-counter (OTC) Bulletin Board. Treasury evaluates the need for adjusting the OTC market-based valuation of the warrants for the effects, if any, of significant events occurring after the close of the market but before the end of the measurement date. Treasury records any changes in valuation, including impairment, on the Statement of Net Cost and the Balance Sheet. Since the valuation is an annual process, Treasury deems changes in valuation of the senior preferred stock and warrants as usual and recurring.

Treasury performs annual calculations, as of September 30, to assess the need for recording an estimated liability in accordance with SFFAS No. 5, *Accounting for Liabilities of The Federal Government,* related to the government's funding commitment to the GSEs under the SPSPAs. Liability recognition is predicated on the probable future occurrence of an excess of liabilities and minimum capital reserve amounts, as defined, over the assets of either GSE at the end of any reporting quarter. The occurrence of future GSE deficits, which ultimately determines the liability to the GSEs, is most sensitive to future changes in the housing price index and, to a lesser extent, future changes in guarantee fees received by the GSEs on single family mortgages and interest rates. For more detailed information on investments in GSEs and the amended SPSPAs, see Note 8—Investments in Government-Sponsored Enterprises.

The government offers its employees' pension and other post-employment retirement benefits, as well as life and health insurance. OPM administers the largest civilian plan and DOD and VA administer the military plans. Generally the benefits payable are recorded during the time employee services are rendered. The related liabilities for defined benefit pension plans, veterans' compensation and burial benefits, post-retirement health benefits, life insurance benefits, education benefits, and *FECA* benefits are recorded at estimated present value of future benefits, less any estimated present value of future normal cost contributions. See Note 12—Federal Employee and Veteran Benefits Payable for additional information.

X. Credit Risk

Credit risk is the potential, no matter how remote, for financial loss from a failure of a borrower or counterparty to perform in accordance with underlying contractual obligations. The government takes on credit risk when it makes direct loans or guarantees to non-federal entities, provides credits to foreign entities, or becomes exposed to institutions which engage in financial transactions with foreign countries.

The government also takes on credit risk related to committed, but undisbursed direct loans, funding commitments to GSEs, and other activities. These activities generally focus on the underlying problems in the credit markets. These programs were developed to provide credit where borrowers are not able to get access to credit with reasonable terms and conditions. Because these programs attempt to correct for a market imperfection, it can expose the government to potential costs and losses. The extent of the risk assumed is described in more detail in the notes to the financial statements, and where applicable, is factored into credit reform models and reflected in fair value measurements.

Y. Treaties and Other International Agreements

For accounting purposes, treaties and other international agreements may be understood as falling into three broad categories:

- No commitment to spend money,
- Commitment to spend money, or
- Potential obligation to spend money.

The proper financial reporting of treaties and other international agreements depends on the probable future outflow or other sacrifice of resources as a result of entering into the agreement.

In many cases, treaties and other international agreements establish frameworks that govern cooperative activities with other countries, but leave to the discretion of the parties whether to engage in any such activities. In other cases, the agreements may contemplate specific cooperative activities, but obligations to engage in them are made subject to the availability of funds. Cooperative activities relevant to these treaties and other international agreements fall under the first category, which does not result in the U.S. government incurring any financial liability. Since these treaties and other international agreements have no financial impact, they are not reported or disclosed in this *Financial Report*.

Some treaties and other international agreements fall under the second category, involving specific obligations by the U.S. government to pay money to other countries or international organizations. Examples of such agreements include those that establish international organizations under which the U.S. government undertakes obligations to pay assessed dues to the organization; grant agreements under which the U.S. government provides foreign assistance funds to other countries; and claims settlement agreements under which the U.S. government agrees to pay specific sums of money to settle claims. For further information related to treaties and other international agreements that fall under the second category, refer to Note 19—Commitments.

The last category encompasses those treaties or other international agreements that may result in contingent liabilities arising from litigation or claims. Information relevant to contingent liabilities stemming from the U.S. government's involvement in treaties or other international agreements is captured in the annual legal representation letter process, and, if applicable, reported on the Balance Sheet or disclosed in Note 18—Contingencies.

Note 2. Cash and Other Monetary Assets

Cash and Other Monetary Assets as of September 30, 2018, and 2017

(In billions of dollars)	2018	2017
Unrestricted cash:		
Cash held by Treasury for governmentwide operations	378.5	153.3
Other	4.9	3.7
Restricted	31.6	26.1
Total cash	415.0	183.1
International monetary assets	66.7	63.3
Gold and silver	11.1	11.1
Foreign currency	14.7	13.7
Total cash and other monetary assets	507.5	271.2

Unrestricted cash includes cash held by Treasury for governmentwide operations (Operating Cash) and all other unrestricted cash held by the federal entities. Operating Cash represents balances from tax collections, federal debt receipts, and other various receipts net of cash outflows for federal debt repayments and other payments. Treasury checks outstanding are netted against Operating Cash until they are cleared by the FR System. Other unrestricted cash not included in Treasury's Operating Cash balance includes balances representing cash, cash equivalents, and other funds held by entities, such as undeposited collections, deposits in transit, demand deposits, amounts held in trust, and imprest funds. Operating Cash held by the Treasury increased by $225.2 billion (an increase of approximately 147 percent) in fiscal year 2018 due to Treasury's investment and borrowing decisions to manage the balance and timing of the government's cash position.

Restrictions on cash are due to the imposition on cash deposits by law, regulation, or agreement. Restricted cash is primarily composed of cash held by the Security Assistance Accounts (SAA), which execute Foreign Military Sales. The SAA included $26.3 billion and $21.3 billion as of September 30, 2018, and 2017, respectively.

International monetary assets include the U.S. reserve position in the International Monetary Fund (IMF) and U.S. holdings of Special Drawing Rights (SDRs). The U.S. reserve position in the IMF is an interest-bearing claim on the IMF that includes the reserve asset portion of the financial subscription that the U.S. has paid in as part of its participation in the IMF as well as any amounts drawn by the IMF from a letter of credit made available by the U.S. as part of its financial subscription to the IMF. The IMF promotes international monetary cooperation and a stable payments system to facilitate growth in the world economy. Its primary activities are surveillance of members' economies, financial assistance, as appropriate, and technical assistance.

Only a portion of the U.S. financial subscription to the IMF is made in the form of reserve assets; the remainder is provided in the form of a letter of credit from the U.S. to the IMF. The balance available under the letter of credit totaled $100.0 billion and $105.3 billion as of September 30, 2018, and 2017 respectively. The U.S. reserve position in the IMF had a U.S. dollar equivalent of $15.4 billion and $11.5 billion as of September 30, 2018, and 2017, respectively.

The SDR is an international reserve asset created by the IMF to supplement the existing reserve assets of its members. These interest-bearing assets can be obtained by IMF allocations, transactions with IMF member countries, or in the form of interest earnings on SDR holdings and reserve positions in the IMF. U.S. SDR holdings are an interest-bearing asset of Treasury's Exchange Stabilization Fund (ESF). The total amount of SDR holdings of the U.S. was the equivalent of $51.0 billion and $51.5 billion as of September 30, 2018, and 2017, respectively.

The IMF allocates SDRs to its members in proportion to each member's quota in the IMF. *The SDR Act*, enacted in 1968, authorized the Secretary of the Treasury to issue SDR Certificates (SDRCs) to the Federal Reserve in exchange for dollars. The amount of SDRCs outstanding cannot exceed the dollar value of SDR holdings. The Secretary of the Treasury determines when Treasury will issue or redeem SDRCs. SDRCs outstanding totaled $5.2 billion as of September 30, 2018, and 2017, and are included in Note 16—Other Liabilities.

As of September 30, 2018, and 2017, other liabilities included $49.3 billion and $49.9 billion, respectively, of interest-bearing liability to the IMF for SDR allocations. The SDR allocation item represents the cumulative total of SDRs distributed by the IMF to the U.S. in allocations. The U.S. has received no SDR allocations since 2009.

Gold is valued at the statutory price of $42.2222 per fine troy ounce. The number of fine troy ounces of gold was 261,498,927 as of September 30, 2018, and 2017. The market value of gold on the London Fixing was $1,187 and $1,283 per fine troy ounce as of September 30, 2018, and 2017, respectively. In addition, silver is valued at the statutory price of $1.2929 per fine troy ounce. The number of fine troy ounces of silver was 16,000,000 as of September 30, 2018, and 2017. The market value of silver on the London Fixing was $14.31 and $16.86 per fine troy ounce as of September 30, 2018, and 2017, respectively. Gold totaling $11.0 billion as of September 30, 2018, and 2017, was pledged as collateral for gold certificates issued and authorized to the FRBs by the Secretary of the Treasury. Gold certificates were valued at $11.0 billion as of September 30, 2018, and 2017, which are included in Note 16—Other Liabilities. Treasury may redeem the gold certificates at any time. Foreign currency is translated into U.S. dollars at the exchange rate at fiscal year-end. The foreign currency is maintained by the ESF and various U.S. federal entities as well as foreign banks.

Note 3. Accounts and Taxes Receivable, Net

Accounts and Taxes Receivable as of September 30, 2018, and 2017

(In billions of dollars)	2018	2017
Accounts receivable:		
Gross accounts receivable	112.4	117.9
Allowance for uncollectible amounts	(30.5)	(29.8)
Accounts receivable, net	81.9	88.1
Taxes receivable:		
Gross taxes receivable	226.7	203.8
Allowance for uncollectible amounts	(163.7)	(148.6)
Taxes receivable, net	63.0	55.2
Total accounts and taxes receivable, net	144.9	143.3

Gross accounts receivable include related interest receivable of $3.6 billion and $3.4 billion as of September 30, 2018, and 2017, respectively.

Treasury comprises approximately 41.1 percent of the government's reported accounts and taxes receivable, net, as of September 30, 2018. The following list of entities comprise 98.3 percent of the government's accounts and taxes receivable, net, of $144.9 billion as of September 30, 2018. Please refer to the following entities financial statements for details on gross accounts and taxes receivable and the related allowance for uncollectible amounts:

- Treasury
- HHS
- SSA
- DOI
- DHS
- DOD
- PBGC
- DOE
- Federal Deposit Insurance Corporation (FDIC)
- VA
- Tennessee Valley Authority (TVA)
- OPM
- DOL
- USDA
- USPS
- Federal Communications Commission (FCC)
- HUD
- Federal Trade Commission (FTC)
- Environmental Protection Agency (EPA)

Accounts and Taxes receivable, net include amounts related to criminal restitution owed to the government. In fiscal year 2018, accounts and taxes receivable, net included $7.9 billion of gross receivable related to criminal restitution orders monitored by responsible entities, of which $0.7 billion is determined to be collectible. Of this gross receivable amount, Treasury and HHS collectively accounts for $5.7 billion of which $0.5 billion is determined to be collectible as of September 30, 2018. In fiscal year 2017, this balance included $8.8 billion of gross receivables related to criminal restitution orders, of which $0.6 billion is determined to be collectible. Of this gross receivable amount, Treasury, HHS, and SSA collectively account for $8.0 billion of which $0.5 billion is determined to be collectible as of September 30, 2017.

Note 4. Loans Receivable and Loan Guarantee Liabilities, Net

Loans Receivable as of September 30, 2018

(In billions of dollars)	Loans Receivable, gross	Interest Receivable	Foreclosed Property	Allowance for Subsidy	Net Loans Receivable	Subsidy Expense (Income) for the Fiscal Year
Federal Direct Student Loans - Education	1,083.7	72.0	-	(40.7)	1,115.0	4.4
Federal Family Education Loans - Education	95.1	21.1	-	(23.3)	92.9	2.4
Electric Loans - USDA	49.3	0.3	-	(2.2)	47.4	(0.1)
Rural Housing Services - USDA	24.4	0.2	0.1	(2.1)	22.6	0.1
Export-Import Bank Loans	19.4	0.2	-	(2.0)	17.6	-
Housing and Urban Development Loans	30.6	9.3	1.3	(15.1)	26.1	(0.2)
All other programs	108.9	3.8	1.2	(16.4)	97.5	1.7
Total loans receivable	1,411.4	106.9	2.6	(101.8)	1,419.1	8.3

Loans Receivable as of September 30, 2017 (Restated)

(In billions of dollars)	Loans Receivable, gross	Interest Receivable	Foreclosed Property	Allowance for Subsidy	Net Loans Receivable	Subsidy Expense (Income) for the Fiscal Year
Federal Direct Student Loans - Education	998.8	59.5	-	(16.8)	1,041.5	5.3
Federal Family Education Loans - Education	101.6	19.3	-	(18.5)	102.4	2.4
Electric Loans - USDA	48.2	0.3	-	(2.1)	46.4	-
Rural Housing Services - USDA	24.7	0.3	0.1	(2.3)	22.8	0.1
Export-Import Bank Loans	21.7	0.2	-	(1.6)	20.3	0.1
Housing and Urban Development Loans	26.3	6.5	1.6	(13.9)	20.5	-
All other programs	107.1	3.2	1.3	(15.3)	96.3	(0.1)
Total loans receivable	1,328.4	89.3	3.0	(70.5)	1,350.2	7.8

Loan Guarantee Liabilities as of September 30, 2018, and 2017

	Principal Amount of Loans Under Guarantee		Principal Amount Guaranteed by the United States		Loan Guarantee Liabilities		Subsidy Expense (Income) for the Fiscal Year	
		Restated		Restated				
(In billions of dollars)	2018	2017	2018	2017	2018	2017	2018	2017
Federal Housing Administration Loans - HUD	1,470.8	1,409.5	1,326.8	1,277.4	19.1	20.6	(8.9)	13.0
Veterans Housing Benefit Programs - VA	663.7	596.5	167.9	151.9	8.7	10.4	(2.8)	(0.6)
Rural Housing Services - USDA	123.0	120.4	110.6	108.3	(0.2)	0.1	(0.2)	(0.5)
Small Business Loans - SBA	128.8	121.0	105.6	99.5	2.7	2.6	(1.1)	(0.9)
Federal Family Education Loans - Education	157.1	176.4	153.8	172.7	2.6	3.7	(1.2)	1.0
All other guaranteed loan programs	99.8	114.3	95.6	109.3	5.3	5.5	(0.1)	0.5
Total loan guarantee liabilities	2,643.2	2,538.1	1,960.3	1,919.1	38.2	42.9	(14.3)	12.5

The government has two types of loan programs: direct loans and loan guarantees. One major type of loan is direct loans such as the Education Federal Direct Student Loans. The second type is loan guarantee programs, such as the HUD's FHA Loans program.

Direct loans and loan guarantee programs are used to promote the nation's welfare by making financing available to segments of the population not served adequately by non-federal institutions, or otherwise providing for certain activities or investments. For those unable to afford credit at the market rate, federal credit programs provide subsidies in the form of direct loans offered at an interest rate lower than the market rate. For those to whom non-federal financial institutions are reluctant to grant credit because of the high risk involved, federal credit programs guarantee the payment of these non-federal loans and absorb the cost of defaults.

The amount of the long-term cost of post-1991 direct loans and loan guarantees outstanding equals the subsidy cost allowance for direct loans and the liability for loan guarantees (including defaulted guaranteed loans) as of September 30. The amount of the long-term cost of pre-1992 direct loans and loan guarantees equals the allowance for subsidy amounts (or present value allowance) for direct loans and the liability for loan guarantees. The long-term cost is based on all direct loans and guaranteed loans disbursed in this fiscal year and previous years that are outstanding as of September 30. It includes the subsidy cost of these loans and guarantees estimated as of the time of loan disbursement and subsequent adjustments such as modifications, reestimates, amortizations, and write-offs.

Net loans receivable includes related interest and foreclosed property. Foreclosed property is property that is transferred from borrowers to a federal credit program, through foreclosure or other means, in partial or full settlement of post-1991 direct loans or as a compensation for losses that the government sustained under post-1991 loan guarantees. Please refer to the financial statements of the USDA, VA, and HUD for significant detailed information regarding foreclosed property. The total subsidy expense/(income) is the cost of direct loans and loan guarantees recognized during the fiscal year. It consists of the subsidy expense/(income) incurred for direct and guaranteed loans disbursed during the fiscal year, for modifications made during the fiscal year of loans and guarantees outstanding, and for upward or downward reestimates as of the end of the fiscal year of the cost of loans and guarantees outstanding. This expense/(income) is included in the Statements of Net Cost.

Loan Programs

The majority of the loan programs are provided by Education, HUD, USDA, Small Business Administration (SBA), VA, and Export-Import (EXIM) Bank. For significant detailed information regarding the direct and guaranteed loan programs listed in the tables above, please refer to the financial statements of the entities.

Education has two major loan programs, authorized by Title IV of the *Higher Education Act of 1965*. The first program is the William D. Ford Federal Direct Loan Program, (referred to as the Direct Loan Program) that was established in fiscal year 1994. The Direct Loan Program offered four types of educational loans: Stafford, Unsubsidized Stafford, PLUS for parents and/or graduate or professional students, and consolidation loans. With this program, the government makes loans directly to students and parents through participating institutions of higher education. Direct loans are originated and serviced through contracts with private vendors. Education disbursed approximately $134.1 billion in Direct Loans to eligible borrowers in fiscal year 2018 and approximately $142.5 billion in fiscal year 2017. The second program is the FFEL Program. This program was established in fiscal year 1965, and is a guaranteed loan program. Like the Direct Loan Program, it offered four types of loans: Stafford, Unsubsidized Stafford, PLUS for parents and/or graduate or professional students, and consolidation loans. The *Student Aid and Fiscal Responsibility Act (SAFRA)*, which was enacted as part of the *Health Care Education and Reconciliation Act of 2010* (P.L. 111-152), eliminated the authority to guarantee new FFEL after June 30, 2010. During fiscal year 2018, Education net loans receivable increased by $64.1 billion, largely the result of increased Direct Loan Program disbursements for new loan originations and FFEL consolidations, net of borrower principal and interest collections.

HUD's Office of Housing plays a vital role for the nation's homebuyers, homeowners, renters, and communities through its nationally administered programs. It includes FHA, the largest mortgage insurer in the world. FHA provides over $1.3 trillion in mortgage insurance on mortgages for Single Family homes, Multifamily properties, and Healthcare facilities. In fiscal year 2018, HUD recognized material misstatements that resulted in corrections to certain prior year amounts reported on the Balance Sheet and Loans Receivable and Loans Guarantee Liabilities, Net (understated by $1.7 billion). Please refer to the Note 1 Restatements section for more information.

USDA's Rural Development offers both direct and guaranteed loans with unique missions to bring prosperity and opportunity to rural areas. The Rural Housing programs provide affordable, safe, and sanitary housing and essential community facilities to rural communities. Rural Utility programs help improve the quality of life in rural areas through a variety of loan programs for electric energy, telecommunications, and water and environmental projects.

The EXIM Bank aids in financing and promoting U.S. exports. Loans and guarantees extended under the medium-term loan program typically have repayment terms of one to seven years, while loans and guarantees extended under the long-term program usually have repayment terms in excess of seven years. Generally, both the medium-term and the long-term loan and guarantee programs cover up to 85 percent of the U.S. contract value of shipped goods.

The SBA provides guarantees that help small businesses obtain bank loans and licensed companies to make investments in qualifying small businesses. The SBA also makes loans to microloan intermediaries and provides a direct loan program that assists homeowners, renters and businesses recover from disasters.

VA operates the following direct loan and loan guarantee programs: Vendee Loans, Acquired Loans, Native American Direct Loans, Housing Guaranteed Loans, Vocational Rehabilitation and Employment Loans, Insurance Loans, and Loan Sale Guarantees. The VA Home Loans program is the largest of the VA loan guarantee programs. The Home Loans program provides loan guarantees and direct loans to veterans, service members, qualifying dependents, and limited non-veterans to purchase homes and retain homeownership with favorable market terms. During fiscal year 2018, the face value of outstanding principal on loans guaranteed by the VA increased by $67.2 billion. This increase was primarily due to $146.3 billion in new loans guaranteed by the VA, partially offset by $77.7 billion in guaranteed loan terminations.

Note 5. Inventories and Related Property, Net

Inventories and Related Property, Net as of September 30, 2018, and 2017

(In billions of dollars)	2018	Reclass 2017
Inventory purchased for resale	68.0	61.8
Inventory and operating material and supplies held for repair	71.1	67.1
Inventory—excess, obsolete, and unserviceable	0.8	0.9
Operating materials and supplies held for use	124.7	143.8
Operating materials and supplies held in reserve for future use	13.8	0.2
Operating materials and supplies-excess, obsolete, and unserviceable	2.9	2.5
Stockpile materials held in reserve for future use	51.9	49.3
Stockpile materials held for sale	4.6	5.1
Other related property	8.6	3.8
Allowance for loss	(8.9)	(7.8)
Total inventories and related property, net	337.5	326.7

Beginning in fiscal year 2018, all entities are now reported together in each line item total for Inventories and Related Property, Net. DOD comprises approximately 81.7 percent of the government's inventories and related property, net, as of September 30, 2018. DOD continues to implement SFFAS No. 48 which permits alternative methods in establishing opening balances for inventories and related property.

The following entities comprise over 98 percent of the government's reported inventories and related property, net of $337.5 billion as of September 30, 2018. Refer to each entities' financial statements for details.

- DOD
- DOE
- HHS

Note 6. Property, Plant, and Equipment, Net

Property, Plant, and Equipment as of September 30, 2018, and 2017

(In billions of dollars)	Cost	Accumulated Depreciation/ Amortization	Net	Cost	Accumulated Depreciation/ Amortization	Net
	2018			2017 Restated		
Buildings, structures, and facilities	728.4	431.1	297.3	692.6	406.9	285.7
Furniture, fixtures, and equipment	1,363.9	782.7	581.2	1,320.6	752.6	568.0
Construction in progress	159.5	N/A	159.5	168.2	N/A	168.2
Land	21.5	N/A	21.5	24.0	N/A	24.0
Other property, plant, and equipment	87.4	56.4	31.0	84.1	43.0	41.1
Total property, plant, and equipment, net	2,360.7	1,270.2	1,090.5	2,289.5	1,202.5	1,087.0

Beginning in fiscal year 2018, all entities are now reported together in each line item total for PP&E. DOD comprises approximately 69.6 percent of the government's reported property, plant, and equipment, net, as of September 30, 2018. DOD continues to implement SFFAS No. 50, *Establishing Opening Balances for General Property, Plant, and Equipment* which permits alternative methods in establishing opening balances for general PP&E. The total acreage of land and land rights excluded in this manner was 20,926,485 as of September 30, 2018.

In fiscal year 2017, restatements due to compilation errors in the presentation of the Balance Sheet and PP&E, net totaled $52.5 billion.

The following entities comprise over 90 percent of the government's reported PP&E net of $1,090.5 billion as of September 30, 2018. Please refer to the entities' financial statements for details.

- DOD
- DOE
- GSA
- VA
- TVA
- DOI
- State
- DOT
- USPS
- DHS
- NASA
- DOC
- DOJ
- HHS

Certain PP&E are multi-use heritage assets, see Note 24—Stewardship Land and Heritage Assets for additional information on multi-use heritage assets.

Note 7. Debt and Equity Securities

Debt and Equity Securities as of September 30, 2018

(In billions of dollars)	Cost	Adjustment	Book Value	
Held-To Maturity				
Debt securities:				
Non-U.S. government	-	-	-	
Mortgage/asset backed	0.2	-	0.2	
Equity Securities:				
All other equity securities	3.5	-	3.5	
Total Held-To-Maturity (Net Investment)	3.7	-	3.7	
Available-for-Sale:				
Debt Securities:	3.5	0.2	3.7	
Total Available-for-Sale (Fair Value)	3.5	0.2	3.7	
Trading Securities:				
Debt Securities:				
Non-U.S. government	12.9	(0.2)	12.7	
Commercial	0.2	-	0.2	
Mortgage/asset backed	3.8	(0.1)	3.7	
Corporate and other bonds	15.9	(0.2)	15.7	
All other debt securities	2.5	(1.0)	1.5	
Equity Securities:				
Unit Trust	16.3	9.5	25.8	
Common Stocks	2.0	0.3	2.3	
All other equity securities	14.3	0.9	15.2	
Total Trading Securities (Fair Value)	67.9	9.2	77.1	
				Total
Total debt and equity securities categorized as held-to-maturity, available-for-sale or trading				84.5
Total NRRIT debt and equity securities (Fair Value)				25.8
Total debt and equity securities				110.3

Debt and Equity Securities as of September 30, 2017

(In billions of dollars)	Cost	Adjustment	Book Value	Total
Held-To Maturity				
Debt securities:				
Non-U.S. government	-	-	-	
Mortgage/asset backed	0.2	-	0.2	
Equity Securities:				
All other equity securities	3.6	-	3.6	
Total Held-To-Maturity (Net Investment)	3.8	-	3.8	
Available-for-Sale:				
Debt Securities:	5.4	0.2	5.6	
Total Available-for-Sale (Fair Value)	5.4	0.2	5.6	
Trading Securities:				
Debt Securities:				
Non-U.S. government	12.2	0.6	12.8	
Commercial	0.2	-	0.2	
Mortgage/asset backed	3.9	-	3.9	
Corporate and other bonds	16.4	0.6	17.0	
All other debt securities	4.0	(0.1)	3.9	
Equity Securities:				
Unit Trust	18.0	8.2	26.2	
Common Stocks	2.1	0.1	2.2	
All other equity securities	15.2	(0.1)	15.1	
Total Trading Securities (Fair Value)	72.0	9.3	81.3	
Total debt and equity securities categorized as held-to-maturity, available-for-sale or trading				90.7
*Total RRB debt and equity securities (Fair Value)				25.5
Total debt and equity securities				116.2

*Includes amounts from NRRIT in 2017. In 2018, NRRIT amounts are reported separately.

These debt and equity securities do not include nonmarketable Treasury securities that have been eliminated in consolidation. Held-to-maturity debt and equity securities are reported as total net investment, net of unamortized discounts and premiums. Available-for-sale debt and equity securities are reported at fair value, net of unrealized gain or loss. Trading debt and equity securities are reported at fair value, net of unrealized gain or loss.

NRRIT on behalf of the RRB, manages and invests railroad retirement assets that are to be used to pay retirement benefits to the nation's railroad workers under the Railroad Retirement Program. As an investment company, NRRIT is subject to different accounting standards that do not require the classifications presented above. Please refer to NRRIT's financial statements for more detailed information concerning this specific investment.

Certain significant consolidation entities apply financial accounting and reporting standards issued by the Financial Accounting Standards Board (FASB) (FASB standards), and such entities, as permitted by SFFAS No.47, are consolidated into the U.S. government's consolidated financial statements without conversion to financial and reporting standards issued by the FASAB (FASAB standards). PBGC, NRRIT, and TVA debt and equity securities are recorded at fair value and have been categorized based upon a fair value hierarchy, in accordance with FASB ASC Section 820, Fair Value Measures and Disclosures, in their respective financial statements.

Debt and Equity Securities as of September 30, 2018, and 2017

(In billions of dollars)	2018	2017
Pension Benefit Guaranty Corporation	62.0	66.7
National Railroad Retirement Investment Trust	25.8	-
Tennessee Valley Authority	11.5	11.4
*Railroad Retirement Board	-	25.5
All other	11.0	12.6
Total securities and investments	110.3	116.2

*Includes amounts from NRRIT in 2017. In 2018, NRRIT amounts are reported separately.

PBGC and TVA invest primarily in fixed maturity and equity securities, classified as trading. PBGC reported an unrealized loss related to trading securities as of September 30, 2018 of $1.2 billion, and an unrealized gain related to trading securities as of September 30, 2017 of $3.3 billion. TVA reported gains related to trading securities held as of September 30, 2018 and 2017 of $1.6 billion and $1.2 billion, respectively. The TVA balance includes $8.4 billion and $8.5 billion as of September 30, 2018, and 2017, respectively, for the Tennessee Valley Authority Retirement System (TVARS). TVARS includes unrealized gains of $0.8 billion as of both September 30, 2018 and 2017. PBGC, NRRIT, and TVA base market values on the last sale of a listed security, on the mean of the “bid-and-ask” for nonlisted securities, or on a valuation model in the case of fixed income securities that are not actively traded. These valuations are determined as of the end of each fiscal year. Purchases and sales of securities are recorded on the trade date. Please refer to the individual financial statements of PBGC, NRRIT, and TVA for more detailed information related to debt and equity securities. These entities comprise 90.0 percent of the total reported debt and equity securities of $110.3 billion as of September 30, 2018.

Note 8. Investments in Government-Sponsored Enterprises

Congress established Fannie Mae and Freddie Mac as GSEs to support mortgage lending. A key function of the GSEs is to purchase mortgages, package those mortgages into securities, which are subsequently sold to investors, and guarantee the timely payment of principal and interest on these securities.

Leading up to the financial crisis, increasingly difficult conditions in the housing market challenged the soundness and profitability of the GSEs, thereby threatening to undermine the entire housing market. In response Congress passed *Housing and Economic Recovery Act of 2008* (HERA) (P.L.110-289) in July 2008. This act created FHFA, with enhanced regulatory authority over the GSEs, and provided the Secretary of the Treasury with certain authorities intended to ensure the financial stability of the GSEs, if necessary. In September 2008, FHFA placed the GSEs under conservatorship and Treasury invested in the GSEs by entering into a SPSPA with each GSE. These actions were taken to preserve the GSEs' assets, ensure a sound and solvent financial condition, and mitigate systemic risks that contributed to market instability.

The purpose of such actions is to maintain the solvency of the GSEs so they can continue to fulfill their vital roles in the home mortgage market while the Administration and Congress determine what structural changes should be made to the housing finance system. Draws under the SPSPAs result in an increased investment in the GSEs as further discussed below. For fiscal year 2018, under SFFAS No. 47 criteria Fannie Mae and Freddie Mac were owned or controlled by the federal government only as a result of (a) regulatory actions (such as organizations in receivership or conservatorship) or (b) other federal government intervention actions. Under the regulatory or other intervention actions, the relationship with the federal government was and is not expected to be permanent. These entities are classified as disclosure entities based on their characteristics as a whole. Accordingly, these entities are not consolidated into the financial statements of the government; however, the value of the investments in these entities, changes in value, and related activity with these entities are included in the consolidated financial statements. This treatment is consistent with how these entities were reported prior to fiscal year 2018 under SFFAC No. 2, *Entity and Display*.

Senior Preferred Stock Purchase Agreements

Under the SPSPAs, Treasury initially received from each GSE: 1) 1,000,000 shares of non-voting variable liquidation preference senior preferred stock with a liquidation preference value of $1,000 per share and 2) a non-transferable warrant for the purchase, at a nominal cost, of 79.9 percent of common stock on a fully-diluted basis. The warrants expire on September 7, 2028. Under the amended SPSPAs, the quarterly dividend payment changed from a 10.0 percent per annum fixed rate dividend on the total liquidation preference (as discussed below) to an amount equivalent to the GSE's positive net worth above a capital reserve amount. The capital reserve amount, which was initially set at $3.0 billion for calendar year 2013, declined by $600 million at the beginning of each calendar year thereafter, and was scheduled to reach zero by calendar year 2018. On December 21, 2017, Treasury and the FHFA agreed to modify the SPSPAs between Treasury and the GSEs to increase the capital reserve amount for each GSE back to $3 billion, effective with the December 2017 dividend payment. In exchange for the increase in the capital reserve, Treasury's liquidation preference in each GSE increased by $3 billion on December 31, 2017. The GSEs will not pay a quarterly dividend if their positive net worth is below the required capital reserve threshold. Cash dividends of $9.9 billion and $25.3 billion were received during fiscal years ended September 30, 2018, and 2017, respectively.

The SPSPAs, which have no expiration date, require that Treasury will disburse funds to the GSEs if at the end of any quarter, the FHFA determines that the liabilities of either GSE exceed its assets. Draws from Treasury under the SPSPAs are designed to ensure that the GSEs maintain positive net worth, with a fixed maximum amount available to each GSE under this agreement established as of December 31, 2012 (refer to the "Contingent Liability to GSEs" section below and Note 18—Contingencies). Draws against the funding commitment of the SPSPAs do not result in the issuance of additional shares of senior preferred stock; instead, it increases the liquidation preference of the initial 1,000,000 shares by the amount of the draw. The combined cumulative liquidation preference totaled $199 billion and $189 billion as of September 30, 2018 and 2017, respectively. Actual payments of $4.0 billion were made to the GSEs for the fiscal year ended September 30, 2018. There were no payments to the GSEs for the fiscal year ended September 30, 2017.

Senior Preferred Stock and Warrants for Common Stock

In determining the fair value of the senior preferred stock and warrants for common stock, Treasury relied on the GSEs' public filings and press releases concerning their financial statements, as well as non-public, long-term financial forecasts, monthly summaries, quarterly credit supplements, independent research regarding preferred stock trading, independent research regarding the GSEs' common stock trading on the OTC Bulletin Board, discussions with each of the GSEs and FHFA, and other information pertinent to the valuations. Because the instruments are not publicly traded, there is no comparable trading information available. The fair valuations rely on significant unobservable inputs that reflect assumptions about the expectations that market participants would use in pricing.

The fair value of the senior preferred stock considers the amount of forecasted dividend payments. The fair valuations assume that a hypothetical buyer would acquire the discounted dividend stream as of the transaction date. The fair value of the senior preferred stock increased as of September 30, 2018 when compared to September 30, 2017, reflecting higher forecasted GSE net income, mainly driven by the reduction in the U.S. corporate tax rate resulting from the December 22, 2017 enactment of the *Tax Cuts and Jobs Act* (P.L. 115-97), a lower discount rate driven by lower volatility among comparable companies, as well as a reduction in the market value of the GSEs' other equity securities that comprise their total equity value.

Factors impacting the fair value of the warrants include the nominal exercise price and the large number of potential exercise shares, the market trading of the common stock that underlies the warrants as of September 30, the principal market, and the market participants. Other factors impacting the fair value include, among other things, the holding period risk related directly to the assumption of the amount of time that it will take to sell the exercised shares without depressing the market. The fair value of the warrants decreased at the end of fiscal year 2018, when compared to 2017, primarily due to decreases in the market price of the underlying common stock of each GSE.

Contingent Liability to GSEs

As part of the annual process undertaken by Treasury, a series of long-term financial forecasts are prepared to assess, as of September 30, the likelihood and magnitude of future draws to be required by the GSEs under the SPSPAs within the forecast time horizon. Treasury used 25-year financial forecasts prepared through years 2043 and 2042 in assessing if a contingent liability was required as of September 30, 2018 and 2017, respectively. If future payments under the SPSPAs are deemed to be probable within the forecast horizon, and Treasury can reasonably estimate such payment, they will accrue a contingent liability to the GSEs to reflect the forecasted equity deficits of the GSEs. This accrued contingent liability will be undiscounted and will not take into account any of the offsetting dividends that could be received, as the dividends, if any, would be owed directly to the General Fund. Such recorded accruals will be adjusted in subsequent years as new information develops or circumstances change. If future payments are reasonably possible, they are disclosed but not recorded as an accrued contingent liability.

Based on the annual forecasts as of September 30, 2018 and 2017, Treasury estimated there was no probable future funding draws. As of September 30, 2018, it is reasonably possible that market volatility or non-recurring events—for instance, changes to accounting policies that impact credit loss provisions—could potentially cause the GSEs to generate quarterly losses and, therefore, result in future funding draws against the funding commitment. Due to challenges quantifying future market volatility or the timing, magnitude, and likelihood of non-recurring events, the total amount of this reasonably possible future funding liability could not be estimated as of September 30, 2018.

P.L. 115-97 caused each GSE to reduce the value of its deferred tax assets in the quarter in which the legislation was enacted. The reduction of the GSEs deferred tax assets resulted in $4.0 billion in actual payments made to the GSEs to ensure they maintained positive net worth, which reduced the remaining funding commitment. At September 30, 2018 and 2017, the maximum remaining funding commitment to the GSEs for the remaining life of the SPSPAs was $254.1 billion and $258.1 billion, respectively. Subsequent funding draws will reduce the remaining commitments. Refer to Note 19—Commitments for a full description of other commitments and risks.

In assessing the need for an estimated contingent liability, Treasury relied on the GSEs' public filings and press releases concerning their financial statements, monthly summaries, and quarterly credit supplements, as well as non-public, long-term financial forecasts, the FHFA House Price Index, discussions with each of the GSEs and FHFA, and other information pertinent to the liability estimates. The forecasts prepared in assessing the need for an estimated contingent liability as of September 30, 2018 include three potential wind-down scenarios, with varying assumptions regarding the timing as to when the GSEs would cease new business activities, including purchasing mortgage loans and issuing new guaranteed mortgage-backed securities. The forecasts also assume a continued gradual wind-down of the retained portfolios (and corresponding net interest income) through 2018, as directed under the amended SPSPAs for each GSE to reduce the maximum balance of its retained mortgage portfolio by 15.0 percent per annum beginning December 31, 2013. The maximum balance of each GSE's retained mortgage portfolio was initially set at $650 billion as of December 31, 2012, and the amended SPSPAs requires that each GSE reduce this maximum balance to $250 billion by December 31, 2018.

Estimation Factors

Treasury's forecasts concerning the GSEs may differ from actual experience. Estimated senior preferred values and future draw amounts will depend on numerous factors that are difficult to predict including, but not limited to, changes in government policy with respect to the GSEs, the business cycle, inflation, home prices, unemployment rates, interest rates, changes in housing preferences, home financing alternatives, availability of debt financing, market rates of guarantee fees, outcomes of loan refinancings and modifications, new housing programs, and other applicable factors.

Regulatory Environment

To date, Congress has not approved a plan to address the future of the GSEs, thus the GSEs continue to operate under the direction of their conservator, the FHFA, whose stated strategic goals for the GSEs are to: (1) maintain, in a safe and sound manner, foreclosure prevention activities and credit availability for new and refinanced mortgages to foster liquid, efficient, competitive, and resilient national housing finance markets; (2) reduce taxpayer risk through increasing the role of private capital in the mortgage market, and (3) build a new single-family securitization infrastructure for use by the GSEs and adaptable for the use by other participants in the secondary market in the future.

The *Temporary Payroll Tax Cut Continuation Act of 2011*(P.L. 112-78) was funded by an increase of ten basis points in the GSEs' guarantee fees (referred to as "the incremental fees") which began in April 2012 and is effective through October 1, 2021. The incremental fees are to be remitted to Treasury and not retained by the GSEs and, thus, do not affect the profitability of the GSEs. For fiscal years 2018 and 2017, the GSEs remitted to Treasury the incremental fees totaling $3.6 billion and $3.2 billion, respectively.

As of September 30, 2018, and 2017, GSEs investments consisted of the following:

Investments in GSEs as of September 30, 2018

(In billions of dollars)	Gross Investments	Cumulative Valuation Gain/(Loss)	Fair Value
Fannie Mae senior preferred stock	123.7	(64.5)	59.2
Freddie Mac senior preferred stock	75.4	(31.2)	44.2
Fannie Mae warrants common stock	3.1	3.2	6.3
Freddie Mac warrants common stock	2.3	1.2	3.5
Total investments in GSEs	204.5	(91.3)	113.2

Investments in GSEs as of September 30, 2017

(In billions of dollars)	Gross Investments	Cumulative Valuation Gain/(Loss)	Fair Value
Fannie Mae senior preferred stock	117.0	(74.5)	42.5
Freddie Mac senior preferred stock	72.1	(41.0)	31.1
Fannie Mae warrants common stock	3.1	9.2	12.3
Freddie Mac warrants common stock	2.3	4.4	6.7
Total investments in GSEs	194.5	(101.9)	92.6

Note 9. Other Assets

Other Assets as of September 30, 2018, and 2017

(In billions of dollars)	2018	2017
Advances and prepayments	70.0	97.4
Regulatory assets	17.3	20.0
Investments in Multilateral Development Banks	7.7	7.7
FDIC receivable from resolution activity, net	3.0	9.3
Other	15.7	13.3
Total other assets	113.7	147.7

Advances and prepayments are assets that represent funds disbursed in contemplation of the future performance of services, receipt of goods, the incurrence of expenditures, or the receipt of other assets. These include advances to contractors and grantees, travel advances, and prepayments for items such as rents, taxes, insurance, royalties, commissions, and supplies.

With regard to regulatory assets, the DOE's Power Marketing Administrations (PMAs) and TVA record certain amounts as assets in accordance with Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) Topic 980, *Regulated Operations*. The provisions of FASB ASC Topic 980 require that regulated enterprises reflect rate actions of the regulator in their financial statements, when appropriate. These rate actions can provide reasonable assurance of the existence of an asset, reduce or eliminate the value of an asset, or impose a liability on a regulated enterprise. In order to defer incurred costs under FASB ASC Topic 980, a regulated entity must have the statutory authority to establish rates that recover all costs, and those rates must be charged to and collected from customers. If the PMAs' or TVA's rates should become market-based, FASB ASC Topic 980 would no longer be applicable, and all of the deferred costs under that standard would be expensed.

On behalf of the U.S., Treasury invests in certain Multilateral Development Banks (MDB), through subscriptions to capital, which allows the MDBs to issue loans at market-based rates to middle-income developing countries. These paid-in capital investments are non-marketable equity investments valued at cost.

The FDIC has the responsibility for resolving failed institutions in an orderly and efficient manner. The resolution process involves valuing a failing institution, marketing it, soliciting and accepting bids for the sale of the institution, determining which bid is least costly to the insurance fund, and working with the acquiring institution through the closing process. FDIC records receivables for resolutions that include payments by the Deposit Insurance Fund (DIF) to cover obligations to insured depositors, advances to receiverships and conservatorships for working capital, and administrative expenses paid on behalf of receiverships and conservatorships.

Other items included in "other" are contract financing payments and estimated future payments to contractors, purchased power generating capacity, deferred nuclear generating units, derivative assets, the balance of assets held by the experience rated carriers participating in the Health Benefits and Life Insurance Program (pending disposition on behalf of OPM), and the cost contribution to buildout the Nationwide Public Safety Broadband.

Note 10. Accounts Payable

Accounts Payable as of September 30, 2018, and 2017

(In billions of dollars)	2018	2017
Department of Defense	29.2	26.4
Department of Veterans Affairs	13.5	3.6
Department of Justice	5.1	6.0
Department of the Treasury	3.8	3.9
Department of Education	3.8	4.2
Department of Energy	3.7	3.7
Department of State	3.6	2.7
General Services Administration	3.1	2.8
Department of Homeland Security	2.5	2.3
U.S. Agency for International Development	2.4	1.8
Department of Commerce	2.0	0.4
Department of Agriculture	1.9	1.8
U.S. Postal Service	1.8	1.6
Tennessee Valley Authority	1.8	1.8
All other	8.5	7.8
Total accounts payable	86.7	70.8

Accounts payable includes amounts due for goods and property ordered and received, services rendered by other than federal employees, cancelled appropriations for which the U.S. government has contractual commitments for payment, and non-debt related interest payable.

Note 11. Federal Debt Securities Held by the Public and Accrued Interest

Federal Debt Securities Held by the Public and Accrued Interest

(In billions of dollars)	Balance September 30, 2017	Net Change During Fiscal Year 2018	Balance September 30, 2018	Average Interest Rate 2018	Average Interest Rate 2017
Treasury securities (public):					
Marketable securities:					
Treasury bills	1,799.6	439.9	2,239.5	2.1%	1.1%
Treasury notes	8,798.9	351.4	9,150.3	2.0%	1.8%
Treasury bonds	1,948.4	166.6	2,115.0	4.1%	4.2%
Treasury inflation-protected securities (TIPS)	1,286.1	90.1	1,376.2	0.8%	0.8%
Treasury floating rate notes (FRN)	342.6	26.5	369.1	2.2%	1.2%
Total marketable Treasury securities	14,175.6	1,074.5	15,250.1		
Nonmarketable securities	497.8	13.3	511.1	2.8%	2.3%
Net unamortized premiums/(discounts)	(39.2)	(5.6)	(44.8)		
Total Treasury securities, net (public)	14,634.2	1,082.2	15,716.4		
Agency securities:					
Tennessee Valley Authority	23.9	(1.5)	22.4		
All other agencies	0.1	-	0.1		
Total agency securities, net of unamortized premiums and discounts	24.0	(1.5)	22.5		
Accrued interest payable	65.9	7.9	73.8		
Total federal debt securities held by the public and accrued interest	14,724.1	1,088.6	15,812.7		

Types of marketable securities:
Bills–Short-term obligations issued with a term of 1 year or less.
Notes–Medium-term obligations issued with a term of 2-10 years.
Bonds–Long-term obligations of more than 10 years.
TIPS–Term of more than 5 years.
FRN–Term of 2 years.

Federal debt securities held by the public outside the government are held by individuals, corporations, state or local governments, FRBs, foreign governments, and other nonfederal entities. The above table details government borrowing primarily to finance operations and shows marketable and nonmarketable securities at face value less net unamortized premiums and discounts including accrued interest.

Securities that represent federal debt held by the public are issued primarily by the Treasury and include:

- Interest-bearing marketable securities (bills, notes, bonds, inflation-protected, and floating rate notes).
- Interest-bearing nonmarketable securities (government account series held by fiduciary and certain deposit funds, foreign series, state and local government series, domestic series, and savings bonds).
- Non-interest-bearing marketable and nonmarketable securities (matured and other).

Gross federal debt (with some adjustments) is subject to a statutory ceiling (i.e., the debt limit). Prior to 1917, Congress approved each debt issuance. In 1917, to facilitate planning in World War I, Congress and the President first enacted a statutory dollar ceiling for federal borrowing. With the *Public Debt Act of 1941* (P.L. 77-7), Congress and the President set an overall limit of $65 billion on Treasury debt obligations that could be outstanding at any one time; since then, Congress and the President have enacted a number of debt limit increases.

During fiscal years 2018 and 2017, Treasury faced two delays in raising the statutory debt limit that required it to depart from its normal debt management procedures and to invoke legal authorities to avoid exceeding the statutory debt limit. During these periods, extraordinary actions taken by Treasury have resulted in federal debt securities not being issued to certain federal government accounts with the securities being restored including lost interest to the affected federal government accounts subsequent to the end of the delay period. The first delay occurred from March 16, 2017 through September 7, 2017. On Friday, September 8, 2017 the *Continuing Appropriations Act, 2018 and Supplemental Appropriations for Disaster Relief Requirements Act, 2017* (P.L. 115-56) was enacted suspending the statutory debt limit through December 8, 2017. The second delay in raising the statutory debt limit occurred from December 9, 2017 through February 8, 2018. On Friday, February 9, 2018, the *Bipartisan Budget Act (BBA) of 2018* (P.L. 115-123) was enacted suspending the statutory debt limit through March 1, 2019.

As of September 30, 2018, and 2017, debt subject to the statutory debt limit was $21,474.8 billion and $20,208.6 billion, respectively. The debt subject to the limit includes Treasury securities held by the public and government guaranteed debt of federal agencies (shown in the table above) and intragovernmental debt holdings (shown in the following table). See Note 26─Subsequent Events for additional information.

Intragovernmental Debt Holdings: Federal Debt Securities Held as Investments by Government Accounts as of September 30, 2018, and 2017

(In billions of dollars)	Balance 2017	Net Change During Fiscal Year 2018	Balance 2018
Social Security Administration, Federal Old-Age and Survivors Insurance Trust Fund	2,820.2	(18.9)	2,801.3
Office of Personnel Management, Civil Service Retirement and Disability Fund	905.1	17.9	923.0
Department of Defense, Military Retirement Fund	661.0	82.4	743.4
Department of Defense, Medicare-Eligible Retiree Health Care Fund	225.8	14.4	240.2
Department of Health and Human Services, Federal Hospital Insurance Trust Fund	197.8	5.0	202.8
Department of Health and Human Services, Federal Supplementary Medical Insurance Trust Fund	70.6	27.6	98.2
Federal Deposit Insurance Corporation, Deposit Insurance Fund	80.2	16.2	96.4
Social Security Administration, Federal Disability Insurance Trust Fund	69.7	23.7	93.4
Department of Labor, Unemployment Trust Fund	60.7	11.9	72.6
Department of Energy, Nuclear Waste Disposal Fund	53.0	0.4	53.4
Office of Personnel Management, Postal Service Retiree Health Benefits Fund	49.5	(2.4)	47.1
Office of Personnel Management, Employees Life Insurance Fund	45.7	0.9	46.6
Department of Transportation, Highway Trust Fund	52.3	(11.1)	41.2
Pension Benefit Guaranty Corporation	28.4	3.3	31.7
Office of Personnel Management, Employees Health Benefits Fund	26.0	1.4	27.4
Department of Housing and Urban Development, FHA, Mutual Mortgage Insurance Capital Reserve Account	30.9	(3.9)	27.0
Department of the Treasury, Exchange Stabilization Fund	22.1	0.2	22.3
Department of State, Foreign Service Retirement and Disability Fund	18.8	0.4	19.2
Department of Housing and Urban Development, Guarantees of Mortgage-Backed Securities Capital Reserve Account	17.1	(0.9)	16.2
National Credit Union Share Insurance Fund	13.1	1.8	14.9
Department of Transportation, Airport and Airway Trust Fund	13.4	0.8	14.2
U.S. Postal Service, Postal Service Fund	11.0	(0.5)	10.5
All other programs and funds	99.1	12.9	112.0
Subtotal	5,571.5	183.5	5,755.0
Total net unamortized premiums/(discounts) for intragovernmental	72.2	(2.3)	69.9
Total intragovernmental debt holdings, net	5,643.7	181.2	5,824.9

Intragovernmental debt holdings represent the portion of the gross federal debt held as investments by government entities such as trust funds, revolving funds, and special funds.

Government entities that held investments in Treasury securities include trust funds that have funds from dedicated collections. For more information on funds from dedicated collections, see Note 20─Funds from Dedicated Collections. These intragovernmental debt holdings are eliminated in the consolidation of these financial statements.

Note 12. Federal Employee and Veteran Benefits Payable

Federal Employee and Veteran Benefits Payable as of September 30, 2018, and 2017

(In billions of dollars)	Civilian 2018	Civilian Reclass 2017	Military 2018	Military 2017	Total 2018	Total Reclass 2017
Pension and accrued benefits	2,048.9	2,013.8	1,621.3	1,568.0	3,670.2	3,581.8
Veterans compensation and burial benefits	N/A	N/A	2,956.3	2,810.0	2,956.3	2,810.0
Post-retirement health and accrued benefits	403.3	375.7	787.0	781.6	1,190.3	1,157.3
Veterans education benefits	N/A	N/A	65.7	50.7	65.7	50.7
Life insurance and accrued benefits	54.9	53.1	6.3	6.9	61.2	60.0
FECA benefits	27.3	28.8	8.3	8.3	35.6	37.1
Liability for other benefits	1.2	1.2	1.8	2.0	3.0	3.2
Total federal employee and veteran benefits payable	2,535.6	2,472.6	5,446.7	5,227.5	7,982.3	7,700.1

Change in Pension and Accrued Benefits

(In billions of dollars)	Civilian 2018	Civilian 2017	Military 2018	Military 2017	Total 2018	Total 2017
Actuarial accrued pension liability, beginning of fiscal year	2,013.8	1,910.7	1,568.0	1,490.6	3,581.8	3,401.3
Pension expense:						
Prior (and past) service costs from plan amendments or new plans	-	-	8.9	(0.9)	8.9	(0.9)
Normal costs	42.3	38.8	34.2	27.4	76.5	66.2
Interest on liability	68.7	69.5	57.5	57.6	126.2	127.1
Actuarial (gains)/losses (from experience)	(2.0)	(12.0)	9.6	(1.6)	7.6	(13.6)
Actuarial (gains)/losses (from assumption changes)	15.8	94.3	2.1	52.9	17.9	147.2
Other	0.1	-	-	-	0.1	-
Total pension expense	124.9	190.6	112.3	135.4	237.2	326.0
Less benefits paid	(89.8)	(87.5)	(59.0)	(58.0)	(148.8)	(145.5)
Actuarial accrued pension liability, end of fiscal year	2,048.9	2,013.8	1,621.3	1,568.0	3,670.2	3,581.8

Change in Post-Retirement Health and Accrued Benefits

(In billions of dollars)	Civilian 2018	Civilian 2017	Military 2018	Military 2017	Total 2018	Total 2017
Actuarial accrued post-retirement health benefits liability, beginning of fiscal year	375.7	352.3	781.6	799.7	1,157.3	1,152.0
Post-Retirement health benefits expense:						
Prior (and past) service costs from plan amendments or new plans	-	-	(20.9)	-	(20.9)	-
Normal costs	15.8	13.4	20.5	20.5	36.3	33.9
Interest on liability	14.1	13.9	30.0	32.3	44.1	46.2
Actuarial (gains)/losses (from experience)	0.7	4.5	(17.2)	(20.6)	(16.5)	(16.1)
Actuarial (gains)/losses (from assumption changes)	12.9	7.5	14.7	(28.8)	27.6	(21.3)
Total post-retirement health benefits expense	43.5	39.3	27.1	3.4	70.6	42.7
Less claims paid	(15.9)	(15.9)	(21.7)	(21.5)	(37.6)	(37.4)
Actuarial accrued post-retirement health benefits liability, end of fiscal year	403.3	375.7	787.0	781.6	1,190.3	1,157.3

The government offers its employees retirement and other benefits, as well as health and life insurance. The liabilities for these benefits, which include both actuarial amounts and amounts due and payable to beneficiaries and health care carriers, apply to current and former civilian and military employees. Large fluctuations in actuarial amounts can result from changes in estimates to future outflows for benefits based on complex assumptions and cost models.

OPM administers the largest civilian plan. DOD and VA administer the largest military plans. Other significant pension plans with more than $10 billion in actuarial accrued liability include those of the Coast Guard (DHS), Foreign Service (State), TVA, and HHS's Public Health Service Commissioned Corps Retirement System. Please refer to the financial statements of the entities listed for further details regarding their pension plans and other benefits.

Change in Civilian Life Insurance and Accrued Benefits

(In billions of dollars)	2018	2017
Actuarial accrued life insurance benefits liability, beginning of fiscal year	53.1	50.9
Life insurance benefits expense:		
New entrant expense	0.6	0.4
Interest on liability	1.9	1.9
Actuarial (gains)/losses (from experience)	(0.6)	(0.4)
Actuarial (gains)/losses (from assumption changes)	0.5	0.9
Total life insurance benefits expense	2.4	2.8
Less costs paid	(0.6)	(0.6)
Actuarial accrued life insurance benefits liability, end of fiscal year	54.9	53.1

Significant Long-Term Economic Assumptions Used in Determining Pension Liability and the Related Expense

	Civilian				Military	
	2018		2017		2018	2017
	FERS	CSRS	FERS	CSRS		
Rate of interest	3.60%	3.00%	3.80%	3.20%	3.50%	3.70%
Rate of inflation	1.60%	1.60%	1.80%	1.80%	1.50%	1.70%
Projected salary increases	1.30%	1.30%	1.50%	1.50%	2.00%	2.10%
Cost of living adjustment	1.40%	1.60%	1.40%	1.80%	N/A	N/A

Significant Long-Term Economic Assumptions Used in Determining Post-Retirement Health Benefits and the Related Expense

	Civilian		Military	
	2018	2017	2018	2017
Rate of interest	3.60%	3.80%	3.60%	3.80%
Single equivalent medical trend rate	4.50%	4.80%	4.16%	4.12%
Ultimate medical trend rate	3.20%	3.40%	4.00%	4.20%

Significant Long-Term Economic Assumptions Used in Determining Life Insurance Benefits and the Related Expense

	Civilian	
	2018	2017
Rate of interest	3.40%	3.60%
Rate of increase in salary	1.30%	1.50%

In accordance with SFFAS No. 33, *Pension, Other Retirement Benefits, and Other Postemployment Benefits: Reporting the Gains and Losses from Changes in Assumptions and Selecting Discount Rates and Valuation Dates*, entities are required to separately present gains and losses from changes in long-term assumptions used to estimate liabilities associated with pensions, ORB, and OPEB on the Statement of Net Cost. SFFAS No. 33 also provides a standard for selecting the discount rate assumption for present value estimates of federal employee pension, ORB, and OPEB liabilities. The SFFAS No. 33 standard for selecting the discount rate assumption requires it be based on a historical average of interest rates on marketable Treasury securities consistent with the cash flows being discounted. Additionally, SFFAS No. 33 provides a standard for selecting the valuation date for estimates of federal employee pension, ORB, and OPEB liabilities that establishes a consistent method for such measurements.

To provide a sustainable, justifiable data resource for the affected entities, Treasury developed a new model and methodology for developing these interest rates in fiscal year 2014. The new method that was developed is based on methodology used to produce the High Quality Market (HQM) Yield Curve pursuant to the *Pension Protection Act of 2006*.[2] As of July 2014, Treasury began releasing interest rate yield curve data using this new U.S. Department of the Treasury's Yield Curve for Treasury Nominal Coupon Issues (TNC yield curve), which is derived from Treasury notes

[2] Treasury's HQM resource is available at: https://www.treasury.gov/resource-center/economic-policy/corp-bond-yield/Pages/Corp-Yield-Bond-Curve-Papers.aspx.

and bonds. The TNC yield curve provides information on Treasury nominal coupon issues and the methodology extrapolates yields beyond 30 years through 100 years maturity. The TNC yield curve is used to produce a Treasury spot yield curve (a zero coupon curve), which provides the basis for discounting future cash flows.

Civilian Employees

Pensions

OPM administers the largest civilian pension plan, which covers substantially all full-time, permanent civilian federal employees. This plan includes two components of defined benefits, the Civil Service Retirement System (CSRS) and the Federal Employees' Retirement System (FERS). The basic benefit components of the CSRS and the FERS are financed and operated through the Civil Service Retirement and Disability Fund (CSRDF), a trust fund. CSRDF monies are generated primarily from employees' contributions, federal entity contributions, payments from the General Fund, and interest on investments in Treasury securities. As of September 30, 2018, USPS has accrued, but not paid OPM, $5.6 billion in CSRS and FERS retirement benefit expenses since 2014.

The Federal Retirement Thrift Investment Board (FRTIB) administers the Thrift Savings Plan (TSP). The TSP investment options include two fixed income funds (the G and F Funds), three stock funds (the C, S, and I Funds) and five lifecycle funds (L 2050, L 2040, L 2030, L 2020, and L Income). The L Funds diversify participant accounts among the G, F, C, S, and I Funds, using professionally determined investment mixes (allocations) that are tailored to different time horizons. Treasury securities held in the G Fund are included in federal debt securities held by the public and accrued interest on the Balance Sheet. The G Fund held $245.5 billion and $217.9 billion in nonmarketable Treasury securities as of September 30, 2018, and 2017, respectively.

The liability for civilian pension and accrued benefits payable increased $35.1 billion. This increase is partly attributable to changes in actuarial assumptions. The assumption loss results primarily from decreases to the assumed rates of interest, which was partly offset by a modest gain from changes in demographic assumptions.

Post-Retirement Health Benefits

The post-retirement civilian health benefit liability is an estimate of the government's future cost of providing post-retirement health benefits to current employees and retirees. Although active and retired employees pay insurance premiums under the Federal Employees Health Benefits Program, these premiums cover only a portion of the costs. The OPM actuary applies economic and demographic assumptions to historical cost information to estimate the liability.

The *Postal Accountability and Enhancement Act of 2006* (Postal Act of 2006) (P.L. No 109-435, Title VIII), made significant changes in the funding of future retiree health benefits for employees of the USPS, including the requirement for the USPS to make scheduled payments to the Postal Service Retiree Health Benefits (PSRHB) Fund. Various legislation required the USPS to make scheduled payments to the PSRHB Fund ranging from $5.4 billion to $5.8 billion per year from fiscal year 2007 through fiscal year 2016. Thereafter, the law required USPS to make annual payments in the amount of the normal cost plus or minus an amount to amortize the unfunded liability or surplus. USPS currently owes the PSRHB Fund a total of $42.6 billion consisting of $38.2 billion for fiscal years 2011 through 2017 and $4.4 billion for fiscal year 2018. As of September 30, 2018, USPS has indicated payment of the total $42.6 billion due will remain open. At this time, Congress has not taken further action on these payments due to the PSRHB Fund from USPS. The cost for each year's payment, including any defaulted payment, along with all other benefit program costs, are included in USPS' net cost for that year in the consolidated Statements of Net Cost. The liability is not included on the governmentwide balance sheet due to the USPS liability being eliminated with the OPM receivable.

The post-retirement civilian health benefit liability increased $27.6 billion. This increase is due to the accruing cost of benefits, interest on the existing liability and an actuarial loss primarily attributable to updated demographic assumptions used in the fiscal year 2018 calculation.

Life Insurance Benefits

One of the other significant employee benefits is the Federal Employees' Group Life Insurance (FEGLI) Program. Employee and annuitant contributions and interest on investments fund a portion of this liability. The actuarial life insurance liability is the expected present value of future benefits to pay to, or on behalf of, existing FEGLI participants, less the expected present value of future contributions to be collected from those participants. The OPM actuary uses salary increase and interest rate yield curve assumptions that are generally consistent with the pension liability.

Workers' Compensation Benefits

The DOL determines both civilian and military entities' liabilities for future workers' compensation benefits for civilian federal employees, as mandated by the FECA, for death, disability, medical, and miscellaneous costs for approved compensation cases, and a component for incurred, but not reported, claims. The FECA liability is determined annually using historical benefit payment patterns related to injury years to predict the future payments.

The actuarial methodology provides for the effects of inflation and adjusts historical payments to constant dollars by applying wage inflation factors (cost-of-living adjustments or COLA) and medical inflation factors (consumer price index-medical or CPIM) to the calculation of projected benefits.

DOL selects the COLA factors, CPIM factors, and discount rate by averaging the COLA rates, CPIM rates, and interest rates for the current and prior four years. Using averaging renders estimates that reflect historical trends over five years instead of conditions that exist in one year.

The COLAs and CPIMs used in the projections for fiscal year 2018 are listed below in the table.

Fiscal Year	COLA	CPIM
2019	1.31%	3.21%
2020	1.51%	3.48%
2021	1.89%	3.68%
2022	2.16%	3.71%
2023+	2.21%	4.09%

DOL selected the interest rate assumptions whereby projected annual payments were discounted to present value based on interest rate assumptions on the TNC Yield Curve to reflect the average duration of income payments and medical payments. The average durations for income payments and medical payments were 14.7 years and 9.6 years, respectively. Based on averaging the TNC Yield Curves for the current and prior four years, the interest rate assumptions for income payments and medical payments were 2.72% and 2.38%, respectively.

For the COLAs, CPIMs, average durations, and interest rate assumptions used in the projections for fiscal year 2017, refer to the fiscal year 2017 *Financial Report.*

Military Employees (Including Veterans)

Pensions

The Military Retirement System consists of a funded, noncontributory, defined benefit plan for military personnel (Services of Army, Navy, Air Force, and the Marine Corps) with an entry date prior to January 1, 2018 and the Blended Retirement System (BRS), generally for military personnel with an entry date on or after January 1, 2018. The defined benefit plan includes non-disability retired pay, disability retired pay, survivor annuity programs, and Combat-Related Special Compensation. The Service Secretaries may approve immediate non-disability retired pay at any age with credit of at least 20 years of active duty service. Reserve retirees must be at least 60 years old and have at least 20 qualifying years of service before retired pay commences; however, in some cases, the age can be less than 60 if the reservist performs certain types of active service. P.L. 110-181 provides for a 90-day reduction in the reserve retirement age from age 60 for every 3 months of certain active duty service served within a fiscal year for service after January 28, 2008 (not below age 50). There is no vesting of defined benefits before non-disabled retirement. There are distinct non-disability benefit formulas related to four populations within the Military Retirement System: Final Pay, High-3, Career Status Bonus/Redux, and the BRS enacted in the *National Defense Authorization Act for Fiscal Year 2016*, effective January 1, 2018. The BRS is a new retirement benefit merging aspects of both a defined benefit annuity with a defined contribution account, through the TSP. The date an individual enters the military generally determines which retirement system they would fall under and if they have the option to select, via a one-time irrevocable election, their retirement system. Military personnel with a start date on or after January 1, 2018 are automatically enrolled in BRS. Although all members serving as of December 31, 2017 were grandfathered under the prior retirement system, Active Duty, National Guard and Reserve personnel meeting established criteria may opt into BRS during calendar year 2018. Under the BRS, retiring members are given the option to receive a portion of their retired pay annuity in the form of a lump sum distribution. For more information on these benefits, see DOD's Office of Military Compensation website https://militarypay.defense.gov.

The DOD Military Retirement Fund was established by P.L. 98-94 (currently Chapter 74 of Title 10, U.S.C.) and accumulates funds to finance, on an accrual basis, the liabilities of DOD military retirement and survivor benefit programs. This Fund receives income from three sources: monthly normal cost payments from the Services to pay for DOD's portion of the current year's service cost; annual payments from the Treasury to amortize the unfunded liability and pay for the increase in the normal cost attributable to Concurrent Receipt (certain beneficiaries with combat-related injuries who are receiving payments from the VA) per P.L. 108-136; and investment income.

The $53.3 billion increase in the Military Retirement Pension liability is attributable to the increase from expected normal and interest costs offset by benefit payments, with additional impacts due to assumption and benefit changes and actuarial experience. Liabilities in the future will depend on interest costs and benefit accruals, future benefit changes, assumption changes, and actuarial experience.

Post-Retirement Health Benefits

Military retirees who are not yet eligible for Medicare (and their eligible non-Medicare eligible dependents) are eligible for post-retirement medical coverage provided by DOD. Depending on the benefit plan selected, retirees and their eligible dependents may receive care from military treatment facilities (MTFs) on a space-available basis or from civilian providers. This TRICARE coverage is available as Select (a preferred provider organization – a health plan that contracts with medical providers to create a network of participating providers; member cost-shares are typically higher for services received out-of-network) and PRIME (a health maintenance organization- a health plan that limits services to a specific network of medical personnel and facilities and usually by requiring referral by a primary-care physician for specialty care; coverage is also available for non-referred and out-of-network care, subject to higher cost-sharing). These postretirement medical benefits are paid by the Defense Health Agency on a pay-as-you-go basis.

Since fiscal year 2002, DOD has provided medical coverage to Medicare-eligible retirees (and their eligible Medicare-eligible dependents). This coverage, called TRICARE for Life (TFL), is a Medicare Supplement plan which includes inpatient, outpatient and pharmacy coverage. Enrollment in Medicare Part B is required to maintain eligibility in TFL. Retirees with TFL coverage can obtain care from MTFs on a space-available basis or from civilian providers.

10 U.S.C., Chapter 56 created the DOD Medicare-Eligible Retiree Health Care Fund (MERHCF), which became operative on October 1, 2002. The purpose of this fund is to account for and accumulate funds for the health benefit costs of Medicare-eligible military retirees, and their dependents and survivors who are Medicare eligible. The Fund receives revenues from three sources: interest earnings on MERHCF assets, Uniformed Services normal cost contributions, and Treasury contributions. The DOD Medicare-Eligible Retiree Health Care Board of Actuaries (the MERHCF Board) approves the methods and assumptions used in actuarial valuations of the MERHCF for the purpose of calculating the per capita normal cost rates (to fund the annual accrued benefits) and determining the unfunded liability amortization payment (the U.S. Treasury contribution). The Secretary of Defense directs the Secretary of Treasury to make DOD's normal cost payments. The MERHCF pays for medical costs incurred by Medicare-eligible beneficiaries at MTFs and civilian providers (including payments to U.S. Family Health Plans for grandfathered beneficiaries), plus the costs associated with claims administration.

DOD's actuaries calculate the actuarial liabilities annually using assumptions and experience (e.g., mortality and retirement rates, health care costs, medical trend rates, and the discount rate). Actuarial liabilities are calculated for all DOD retiree medical benefits, including both the benefits funded through the MERHCF as well as the benefits for pre-Medicare retirees who are paid on a pay-as-you-go basis. Military post-retirement health and accrued benefits payable increased $5.4 billion. This increase is due primarily to changes in actuarial assumptions and expected normal and interest costs, offset by changes due to plan amendments and favorable recent claims experience. The $20.9 billion reduction in the liability due to plan amendments reflects the estimated savings resulting from change to pharmacy copays enacted in the *National Defense Authorization Act for Fiscal Year 2018*, effective February 1, 2018.

In addition to the health care benefits the federal government provides for civilian and military retirees and their dependents, the VA also provides medical care to veterans on an "as available" basis, subject to the limits of the annual appropriations. In accordance with 38 CFR 17.36 (c), VA's Secretary makes an annual enrollment decision that defines the veterans, by priority, who will be treated for that fiscal year subject to change based on funds appropriated, estimated collections, usage, the severity index of enrolled veterans, and changes in cost. While VA expects to continue to provide medical care to veterans in future years, an estimate of such future benefits cannot be reasonably made. Accordingly, medical care expenses are recognized in the period the medical care services are provided and included on the Statement of Net Cost. For the fiscal years 2014 through 2018, the average medical care cost per year was $63.2 billion.

Veterans Compensation and Burial Benefits

The government compensates disabled veterans and their survivors. Veterans' compensation is payable as a disability benefit or a survivor's benefit. Entitlement to compensation depends on the veteran's disabilities having been incurred in, or aggravated during, active military service; death while on duty; or death resulting from service-connected disabilities, if not on active duty.

Eligible veterans who die or are disabled during active military service-related causes, as well as their dependents, and dependents of service members who died during active military service, receive compensation benefits. In addition, service members who die during active military service and veterans who separated under other than dishonorable conditions are provided with a burial flag, headstone/marker, and grave liner for burial in a VA national cemetery or are provided a burial flag, headstone/marker and a plot allowance for burial in a private cemetery. These benefits are provided under 38 U.S.C., Part 2, Chapter 23 in recognition of a veteran's military service and are recorded as a liability in the period the requirements are met.

The liability for veterans' compensation and burial benefits payable is based on an actuarial estimate of future compensation and burial payments. It increased by $146.3 billion in fiscal year 2018. The $146.3 billion increase is primarily attributable to assumption changes and experience. The major impact from experience changes was from veterans who first became eligible for benefits during fiscal year 2018. The major impact from assumption changes was from a decrease in the discount rate. Several significant actuarial assumptions were used in the valuation of compensation and burial benefits to calculate the present value of the liability. A liability was recognized for the projected benefit payments to: 1) those beneficiaries, including veterans and survivors, currently receiving benefit payments; 2) current veterans who will in the future become beneficiaries of the compensation program; and 3) a proportional share of those in active military service as of the valuation date who are expected to be future veterans. Future benefit payments to survivors of those veterans in classes 1, 2, and 3 above are also incorporated into the projection. The projected liability does not include any administrative costs.

The veterans' compensation and burial benefits liability is developed on an actuarial basis. It is impacted by interest on the liability balance, experience gains or losses, changes in actuarial assumptions, prior service costs, and amounts paid for costs included in the liability balance.

Change in Veterans Compensation and Burial Benefits

	Compensation		Burial		Total	
(In billions of dollars)	2018	2017	2018	2017	2018	2017
Actuarial accrued liability, beginning of fiscal year	2,805.1	2,491.4	4.9	4.9	2,810.0	2,496.3
Current year expense:						
Interest on the liability balance	102.7	97.9	0.2	0.2	102.9	98.1
Prior (and past) service costs from program amendments or new programs during the period	14.3	-	-	-	14.3	-
Actuarial (gains)/losses (from experience)	45.5	50.7	(0.1)	(0.2)	45.4	50.5
Actuarial (gains)/losses (from assumption changes)	66.8	244.3	2.4	0.2	69.2	244.5
Total current year expense	229.3	392.9	2.5	0.2	231.8	393.1
Less benefits paid	(85.3)	(79.2)	(0.2)	(0.2)	(85.5)	(79.4)
Actuarial accrued liability, end of fiscal year	2,949.1	2,805.1	7.2	4.9	2,956.3	2,810.0

Significant Economic Assumptions Used in Determining Veterans Compensation and Burial Benefits as of September 30, 2018, and 2017	2018	2017
Rate of interest	3.52%	3.66%
Rate of inflation	2.28%	2.28%

Veterans Education Benefits

For eligible Veterans and their dependents, the VA provides four education/retraining type programs:

- Post 9/11 GI Bill
- Montgomery GI Bill-Active Duty
- Vocational Rehabilitation and Employment
- Dependent Education Assistance

The total liability for the four education/training programs is based on actuarial estimates of future payments and increased by $15.0 billion in fiscal year 2018. The $15.0 billion increase is primarily attributable to assumption changes and experience. The major impact from experiences changes was from veterans who first became eligible for benefits during fiscal year 2018. The major impact from assumption changes was from a $12.0 billion adjustment made outside of the model to account for potential new enrollees in the next year. This adjustment was based on the number of new enrollees who began to use their Post-9/11 GI Bill benefits in 2018. The actuarial modeling estimates are based on beneficiaries who have already started to use those benefits. Currently, these models do not include assumptions for expected future new beneficiaries as an input to calculate the estimated liability. However, based on experience, it is probable that new beneficiaries will enroll in these programs in the future. As of September 30, 2018, VA has not developed a practical way to estimate the future number of new beneficiaries in its models, in accordance to SFFAS No. 5. Since these models have only been placed in operation for the past two years, enhancements and studies such as assumption revisions and possibility of inclusion of multiple years of future enrollees in the models will be examined. Results of these enhancements and studies may lead to significant changes in the future liabilities.

In fiscal year 2016, VA reported an estimated liability for the Post 9/11 GI Bill of $59.6 billion. This was the first time VA had reported this estimated liability and the models and assumptions used were conservative with limited experience studies or assumptions. At that time, VA had not developed models or estimates for the other three programs listed; however, it was management's assertion that the amount recorded for the Post 9/11 GI Bill was large enough to include any liability for the other three programs. In fiscal year 2017, VA broke out each program and developed individual estimates based on actuarial standards. While not reported in 2016, VA developed an estimate for fiscal year 2016 for each of the new programs to be used for comparisons only in 2017. This estimate reflected an increase in the liability of $8.7 billion. This amount is presented as "Other" for fiscal year 2017 in the schedule of "Changes in Veterans Education Benefits" provided below.

The fiscal year 2017 Actuarial (gains)/losses from assumption changes included the impacts of refinements to the modeling of the Post 9/11 GI Bill program (liability decrease of $29.3 billion); prior service costs associated with the "Forever GI Bill of 2017," which eliminated the 15-year limitation for using the benefit (liability increase of $8.2 billion); and other assumption changes (liability increase of $6.3 billion).

For details regarding actuarial assumptions and the four education/retraining type programs, please refer to VA's financial statements.

Change in Veterans Education Benefits

(In billions of dollars)	2018	2017
Actuarial accrued liability, beginning of fiscal year	50.7	59.6
Current year expense:		
Interest on liability	1.3	0.7
Actuarial (gains)/losses (from experience)	14.6	9.3
Actuarial (gains)/losses (from assumption changes)	10.0	(14.8)
Other	-	8.7
Total current year expense	25.9	3.9
Less benefits paid	(10.9)	(12.8)
Actuarial accrued liability, end of fiscal year	65.7	50.7

Life Insurance Benefits

The largest veterans' life insurance programs consist of the following:

- National Service Life Insurance (NSLI) covers policyholders who served during World War II.
- Veterans' Special Life Insurance (VSLI) was established in 1951 to meet the insurance needs of veterans who served during the Korean Conflict and through the period ending January 1, 1957.
- Service-Disabled Veterans Insurance (S-DVI) program was established in 1951 to meet the insurance needs of veterans who received a service-connected disability rating.

The components of veteran life insurance liability for future policy benefits are presented below:

Veterans Life Insurance Liability as of September 30, 2018, and 2017

(In billions of dollars)	2018	2017
Insurance death benefits:		
NSLI	2.3	2.8
VSLI	1.1	1.2
S-DVI	0.7	0.7
Other	0.3	0.3
Total death benefits	4.4	5.0
Death benefit annuities	-	-
Disability income & waiver	0.8	0.8
Insurance dividends payable	0.9	1.1
Unpaid policy claims	0.2	-
Total veterans life insurance liability	6.3	6.9

Insurance dividends payable consists of dividends left on deposit with VA, related interest payable, and dividends payable to policyholders. Unpaid policy claims consists of insurance claims that are pending at the end of the reporting period, an estimate of claims that have been incurred but not yet reported, and disbursements in transit.

The VA supervises Service members Group Life Insurance (SGLI) and Veterans Group Life Insurance programs that provide life insurance coverage to members of the uniformed armed services, reservists, and post-Vietnam Veterans as well as their families. VA has entered into a group policy with the Prudential Insurance Company of America to administer and provide the insurance payments under these programs. All SGLI insureds are automatically covered under the Traumatic

Injury Protection program, which provides for insurance payments to veterans who suffer a serious traumatic injury in service.

Pension Benefits

The VA also provides certain veterans and/or their dependents with pension benefits, based on annual eligibility reviews. The pension program for veterans is not accounted for as a "federal employee pension plan" under SFFAS No. 5 due to differences between its eligibility conditions and those of federal employee pensions. Therefore, a future liability for pension benefits is not recorded. VA pension liabilities are recognized when due and payable. The projected amounts of future payments for pension benefits (presented for informational purposes only) as of September 30, 2018, and 2017, was $104.8 billion and $87.6 billion, respectively.

Note 13. Environmental and Disposal Liabilities

Environmental and Disposal Liabilities as of September 30, 2018, and 2017

(In billions of dollars)	2018	2017
Department of Energy	494.0	383.8
Department of Defense	70.4	68.3
All other entities	12.9	12.4
Total environmental and disposal liabilities	577.3	464.5

During World War II and the Cold War, DOE (or predecessor entities) developed a massive industrial complex to research, produce, and test nuclear weapons. This included nuclear reactors, chemical-processing buildings, metal machining plants, laboratories, and maintenance facilities that manufactured tens of thousands of nuclear warheads and conducted more than 1,000 nuclear tests.

At all sites where these activities took place, some environmental contamination occurred. This contamination was caused by the production, storage, and use of radioactive materials and hazardous chemicals, which resulted in contamination of soil, surface water, and groundwater. The environmental legacy of nuclear weapons production also includes thousands of contaminated buildings and large volumes of waste and special nuclear materials requiring treatment, stabilization, and disposal.

Estimated cleanup costs at sites for which there are no current feasible remediation approaches, such as the Nevada nuclear test site, are excluded from the estimates, although applicable stewardship and monitoring costs for these sites are included. DOE has not been required through regulation to establish remediation activities for these sites.

Estimating DOE's environmental cleanup liability requires making assumptions about future activities and is inherently uncertain. The future course of DOE's environmental cleanup and disposal will depend on a number of fundamental technical and policy choices, many of which have not been made. The sites and facilities could be restored to a condition suitable for any desirable use, or could be restored to a point where they pose no near-term health risks. Achieving the former conditions would have a higher cost but may (or may not) warrant the costs, or be legally required. The environmental and disposal liability estimates include contingency estimates intended to account for the uncertainties associated with the technical cleanup scope of the program. Congressional appropriations at lower than anticipated levels or unplanned delays in project completion would cause increases in life-cycle costs.

DOE's environmental and disposal liabilities also include the estimated cleanup and post-closure responsibilities, including surveillance and monitoring activities, soil and groundwater remediation, and disposition of excess material for sites. The Department is responsible for the post-closure activities at many of the closure sites as well as other sites. The costs for these post-closure activities are estimated for a period of 75 years after the balance sheet date, i.e., through 2093 in fiscal year 2018 and through 2092 in fiscal year 2017. While some post-cleanup monitoring and other long-term stewardship activities post-2093 are included in the liability, there are others DOE expects to continue beyond 2093 for which the costs cannot reasonably be estimated.

A portion of DOE's environmental and disposal liabilities at various field sites includes anticipated costs for facilities managed by DOE's ongoing program operations which will ultimately require stabilization, deactivation, and decommissioning. The estimate is largely based upon a cost-estimating model. Site specific estimates are used in lieu of the cost-estimating model, when available. Cost estimates for ongoing program facilities are updated each year. For facilities newly contaminated since fiscal year 1997, cleanup costs allocated to future periods and not included in environmental and disposal liabilities amounted to $0.9 billion for both fiscal years 2018 and 2017.

The predominant change in the DOE's environmental liabilities estimates in fiscal year 2018 resulted from Waste Treatment and Immobilization Plant (WTP) construction and operating costs, and the updated tank farm retrieval and closure cost. Other changes resulted from inflation adjustments to reflect constant dollars for the current year; improved and updated estimates for the same scope of work, including changes resulting from deferral or acceleration of work; revisions in technical approach or scope, including additional contamination; updated estimates of projected waste volumes; changes in the DOE's allocable percentage share of future costs; legal and regulatory changes; and cleanup activities performed.

On October 9, 2018, the U.S. Court of Appeals for the Fourth Circuit lifted the Preliminary Injunction, allowing DOE to move forward with termination of construction of the Mixed Oxide (MOX) facility. With termination of the MOX facility, which was the fiscal year 2018 approach for plutonium disposition, DOE will pursue a Dilute and Dispose approach in fiscal year 2019. The lower cost of the Dilute and Dispose approach is expected to reduce the program liability. DOE remains committed to disposing of 34 metric tons of plutonium.

Please refer to the financial statements of DOE for detailed information regarding DOE's environmental and disposal liabilities, including cleanup costs.

Beginning in fiscal year 2018, DOD's individual amounts are reported together as a single line total for its portion of Environmental and Disposal Liabilities. DOD must restore active installations, installations affected by base realignment and closure, and other areas formerly used as DOD sites. DOD also bears responsibility for disposal of chemical weapons and environmental costs associated with the disposal of weapons systems (primarily nuclear powered aircraft carriers and submarines).

DOD follows the *Comprehensive Environmental Response, Compensation, and Liability Act* (CERCLA), *Superfund Amendments and Reauthorization Act, Resource Conservation and Recovery Act* (RCRA) and other applicable federal or state laws to clean up contamination. The CERCLA and RCRA require the DOD to clean up contamination in coordination with regulatory entities, current owners of property damaged by the Department, and third parties that have a partial responsibility for the environmental restoration. Failure to comply with agreements and legal mandates puts the DOD at risk of incurring fines and penalties.

DOD uses engineering estimates and independently validated models to estimate environmental costs. The engineering estimates are used after obtaining extensive data during the remedial investigation/feasibility phase of the environmental project.

For general PP&E placed into service after September 30, 1997, DOD expenses associated environmental costs systematically over the life of the asset using two methods: physical capacity for operating landfills and life expectancy in years for all other assets. DOD expenses the full cost to clean up contamination for stewardship PP&E at the time the asset is placed into service. DOD has expensed the costs for cleanup associated with general PP&E placed into service before October 1, 1997, except for costs intended to be recovered through user charges; for those costs, DOD has expensed cleanup costs associated with that portion of the asset life that has passed since it was placed into service. DOD systematically recognizes the remaining cost over the remaining life of the asset. The unrecognized portion of the estimated total cleanup costs associated with disposal of general PP&E as of September 30, 2018 was $4.8 billion; this amount was unknown as of September 30, 2017.

DOD is unable to estimate and report a liability for environmental restoration and corrective action for buried chemical munitions and agents, because the extent of the buried chemical munitions and agents is unknown at this time. DOD is also unable to provide a complete estimate for the Formerly Utilized Sites Remedial Action Program. DOD has ongoing studies and will update its estimate as additional liabilities are identified. DOD has the potential to incur costs for restoration initiatives in conjunction with returning overseas DOD facilities to host nations. However, DOD is unable to provide a reasonable estimate at this time because the extent of required restoration is unknown.

Please refer to the financial statements of DOD for further information regarding DOD's environmental and disposal liabilities, including cleanup costs.

Note 14. Benefits Due and Payable

Benefits Due and Payable as of September 30, 2018, and 2017

(In billions of dollars)	2018	2017
Federal Old-Age and Survivors Insurance	75.1	71.3
Grants to States for Medicaid	35.6	34.1
Federal Supplementary Medical Insurance (Medicare Parts B and D)	30.7	30.6
Federal Hospital Insurance (Medicare Part A)	31.5	30.0
Federal Disability Insurance	24.6	26.9
All other benefits programs	13.6	25.9
Total benefits due and payable	211.1	218.8

Benefits due and payable are amounts owed to program recipients or medical service providers as of September 30 that have not been paid. Most of the benefits due and payable relate to programs administered by HHS and SSA. For a description of the programs, see Note 22—Social Insurance and the unaudited RSI—Social Insurance section.

Note 15. Insurance and Guarantee Program Liabilities

Insurance and Guarantee Program Liabilities as of September 30, 2018, and 2017

(In billions of dollars)	2018	2017
Insurance and Guarantee Program Liabilities:		
Pension Benefit Guaranty Corporation - Benefit Pension Plans	158.0	178.6
Department of Agriculture - Federal Crop Insurance	10.3	11.3
Department of Homeland Security - National Flood Insurance Programs	1.7	12.3
National Credit Union Administration - Share Insurance Fund	0.2	0.3
Total insurance and guarantee program liabilities	170.2	202.5

Insurance and guarantee program liabilities are recognized for known losses and contingent losses to the extent that the underlying contingency is deemed probable and a loss amount is reasonably measurable. Please see Note 18—Contingencies for discussion on the meaning of "probable" depending on the accounting framework used by each significant consolidation entity.

As of September 30, 2018, and 2017, $158.0 billion and $178.6 billion, respectively, pertain to the PBGC single-employer and multiemployer pension plans. PBGC insures pension benefits for participants in covered defined benefit pension plans. The total decrease of $20.6 billion in PBGC's liability for insured pension plans includes decreases of $9.5 billion and $11.1 billion for single-employer and multiemployer plans, respectively. For both single-employer and multiemployer plans, the decreases were primarily driven by changes in actuarial assumptions related to changes in interest factors. As of September 30, 2018, and 2017, PBGC had total liabilities of $163.7 billion and $184.4 billion, and its total liabilities exceeded its total assets by $51.4 billion and $76.0 billion, respectively. Refer to PBGC's financial statements for more information.

As of September 30, 2018, and 2017, $10.3 billion and $11.3 billion, respectively, pertain to the USDA's Federal Crop Insurance Program. The Federal Crop Insurance Program is administered by the Federal Crop Insurance Corporation, whose mission is to provide an actuarially sound risk management program to reduce agricultural producers' economic losses due to natural disasters.

As of September 30, 2018, and 2017, $1.7 billion and $12.3 billion, respectively, pertain to the DHS National Flood Insurance Program (NFIP). The NFIP insurance liability represents an estimate based on the loss and loss adjustment expense factors inherent to the NFIP Insurance Underwriting Operations, including trends in claim severity and frequency. The estimate is driven primarily by flooding activity in the U.S. and can vary significantly year over year depending on the timing and severity of flooding activity. A reduced estimated insurance liability for disaster relief efforts for the significant hurricanes in fiscal year 2018 is the primary driver of the $10.6 billion decrease from fiscal year 2017.

As of September 30, 2018, and 2017, $0.2 billion and $0.3 billion, respectively, pertain to NCUA's National Credit Union Share Insurance Fund (NCUSIF). The NCUSIF is administered by the NCUA, and protects members' accounts in insured credit unions in the event of a credit union failure.

Certain significant consolidation entities apply FASB standards, and such entities, as permitted by SFFAS No. 47, are consolidated into the U.S. government's consolidated financial statements without conversion to FASAB standards.

Note 16. Other Liabilities

Other Liabilities as of September 30, 2018, and 2017 (In billions of dollars)	2018	Restated 2017
Unearned revenue and assets held for others:		
Unearned fees for nuclear waste disposal (DOE) and other unearned revenue	59.5	60.0
Assets held on behalf of others	117.3	111.4
Subtotal	176.8	171.4
Employee-related liabilities:		
Accrued federal employees' wages and benefits	42.1	37.4
Selected DOE contractors' and D.C. employees' pension benefits	53.7	51.5
Subtotal	95.8	88.9
International monetary liabilities and gold certificates:		
Exchange Stabilization Fund	54.5	55.1
Gold certificates	11.0	11.0
Subtotal	65.5	66.1
Subsidies and grants:		
Farm and other subsidies	9.4	13.2
Grant payments due to state and local governments and others	21.3	22.1
Subtotal	30.7	35.3
Miscellaneous liabilities:		
Legal and other contingencies	52.4	56.5
Non-federal power projects and capital lease liabilities, and disposal liabilities	11.4	12.1
Other miscellaneous	46.4	42.8
Subtotal	110.2	111.4
Total	479.0	473.1

Other liabilities represent liabilities that are not separately identified on the Balance Sheet and are presented on a comparative basis by major category.

Unearned Revenue and Assets Held for Others

The government recognizes a liability when it receives money in advance of providing goods and services or assumes custody of money belonging to others. Advances and prepayments include USPS customer deposits used for future mailings. The government's unearned revenue from fees DOE has collected from utility companies for the future cost of managing the disposal of nuclear waste and interest income received is about $41.9 billion and $40.3 billion as of September 30, 2018, and 2017, respectively. Other unearned revenue includes USPS income for prepaid postage and prepaid P.O. Box rentals. Assets held on behalf of others include funds collected in advance for such things as outstanding postal money orders and undelivered Defense articles. SAA holds $89.1 billion and $85.6 billion as of September 30, 2018, and 2017, respectively for articles and services for future delivery to foreign governments.

Employee-Related Liabilities

This category includes amounts owed to employees at year-end and actuarial liabilities for certain non-federal employees. Actuarial liabilities for federal employees and veteran benefits are included in Note 12–Federal Employee and Veteran Benefits Payable. The largest liability in the employee-related liabilities category is the amount owed at the end of the fiscal year to federal employees for wages and benefits (including accrued annual leave). In addition, DOE is liable to certain contractors for contractor employee pension and postretirement benefits, which is about $21.3 billion and $23.1 billion as of September 30, 2018 and 2017, respectively. Also, the government owed about $8.4 billion and $8.7 billion as of September 30, 2018, and 2017 respectively, for estimated future pension benefits of the District of Columbia's judges, police, firefighters, and teachers.

International Monetary Liabilities and Gold Certificates

Consistent with U.S. obligations in the IMF on orderly exchange arrangements and a stable system of exchange rates, the Secretary of the Treasury, with the approval of the President, may use the ESF to deal in gold, foreign exchange, and other instruments of credit and securities. As of September 30, 2018, and 2017, other liabilities includes $49.3 billion and $49.9 billion, respectively, of interest-bearing liability to the IMF for SDR allocations.

Gold certificates are issued in nondefinitive or book-entry form to the Federal Reserve Bank of New York (FRBNY). The government's liability incurred by issuing the gold certificates, as reported on the Balance Sheet, is limited to the gold being held by Treasury at the standard value established by law. Upon issuance of gold certificates to the FRBNY, the proceeds from the certificates are deposited into the operating cash of the U.S. government. All of the Treasury certificates issued are payable to the FRBNY. Gold certificates were valued at $11.0 billion as of September 30, 2018, and 2017, respectively.

See Note 2—Cash and Other Monetary Assets for additional information.

Subsidies and Grants

The government supports the public good through a wide variety of subsidy and grant programs in such areas as agriculture, medical and scientific research, education, and transportation. USDA programs such as Conservation Reserve, and Agricultural Risk Coverage and Price Loss Coverage account for the majority of the subsidies due, about $4.8 billion and $8.9 billion as of September 30, 2018 and 2017, respectively.

The government awards hundreds of billions of dollars in grants annually. These include project grants that are competitively awarded for entity-specific projects, such as HHS grants to fund projects to "enhance the independence, productivity, integration, and inclusion into the community of people with developmental disabilities." Other grants are formula grants, such as matching grants. Formula grants go to state governments for such things as education and transportation programs. These grants are paid in accordance with distribution formulas that have been provided by law or administrative regulations. Of the total liability reported for grants as of September 30, 2018, and 2017, DOT, Education, HHS and USDA collectively owed their grantees about $20.4 billion and $20.6 billion, respectively. Refer to the financial statements of the respective entities for additional information.

Miscellaneous Liabilities

Some of the more significant liabilities included in this category are for (1) legal and other contingencies (see Note 18—Contingencies), (2) Bonneville Power Administration liability to pay annual budgets of several power projects for its electrical generating capacity, (3) payables upon return of securities loaned and (4) September 11th Victim Compensation Fund. Certain HUD amounts have been restated. Refer to Note 1.U—Restatements for more information.

In addition, many federal entities reported relatively small amounts of miscellaneous liabilities that are not otherwise classified.

Note 17. Collections and Refunds of Federal Revenue

Collections of Federal Tax Revenue for the Year Ended September 30, 2018

(In billions of dollars)	Federal Tax Revenue Collections	Tax Year to Which Collections Relate 2018	2017	2016	Prior Years
Individual income tax and tax withholdings	3,089.8	1,932.6	1,096.7	33.5	27.0
Corporate income taxes	262.7	150.3	99.7	1.7	11.0
Excise taxes	98.5	73.3	24.9	0.1	0.2
Unemployment taxes	43.4	34.1	9.1	0.1	0.1
Customs duties	43.4	43.4	-	-	-
Estate and gift taxes	23.9	0.1	20.9	1.1	1.8
Railroad retirement taxes	6.3	4.9	1.4	-	-
Fines, penalties, interest, and other revenue	7.2	7.1	0.1	-	-
Subtotal	3,575.2	2,245.8	1,252.8	36.5	40.1
Less: amounts collected for non-federal entities	(0.5)				
Total	3,574.7				

Treasury is the government's principal revenue-collecting entity. Collections of individual income and tax withholdings include FICA/SECA and individual income taxes. These taxes are characterized as non-exchange revenue.

Excise taxes, also characterized as non-exchange revenue, consist of taxes collected for various items, such as airline tickets, gasoline products, distilled spirits and imported liquor, tobacco, firearms, and others.

Tax and other revenues reported reflect the effects of tax expenditures which are special exclusions, exemptions, deductions, tax credits, preferential tax rates, and tax deferrals that allow individuals and businesses to reduce taxes they may otherwise owe. The *Congressional Budget Act of 1974* (P.L. 93-344 or Budget Act) requires that a list of tax expenditures be included in the annual Budget. Tax expenditures may be viewed as alternatives to other policy instruments, such as spending or regulatory programs. For example, the government supports college attendance through both spending programs and tax expenditures. The government uses Pell Grants to help low- and moderate-income students afford college and allows certain funds used to meet college expenses to grow tax free in special college savings accounts.

Tax expenditures include deductions and exclusions which reduce the amount of income subject to tax. Examples are the deduction for mortgage interest on personal residences and the exclusion of interest on state and local bonds. Tax expenditures also include tax credits, which reduce tax liability dollar for dollar for the amount of credit. For example, the child tax credit reduces liability by $2,000 per child for taxpayers eligible to use it fully. Other credits are targeted at business activity, such as credits for producing electricity from renewable energy or the research and experimentation credit, which encourages businesses in the U.S. to increase investment in research activities. In addition, tax expenditures include some provisions that allow taxpayers to defer tax liability. Examples include provisions that allow immediate expensing or accelerated depreciation of certain capital investments, and others that allow taxpayers to defer their tax liability, such as the deferral of recognition of income on contributions to and income accrued within qualified retirement plans.

The Total Revenues reported in the Statement of Operations and Changes in Net Position and the related information reported in this note, do not include explicit line items for tax expenditures, but the total revenue amounts and budget results reflect the effect of these expenditures. Tax expenditures are discussed in this note, the unaudited MD&A, and in the unaudited Other Information section of the *Financial Report*.

Federal Tax Refunds Disbursed for the Year Ended September 30, 2018

(In billions of dollars)	Refunds Disbursed	Tax Year to Which Refunds Relate 2018	2017	2016	Prior Years
Individual income tax and tax withholdings	401.4	54.4	307.9	29.8	9.3
Corporate income taxes	60.1	4.8	25.9	9.2	20.2
Excise taxes	1.6	0.5	0.6	0.1	0.4
Unemployment taxes	0.1	-	0.1	-	-
Customs duties	1.9	1.1	0.3	0.2	0.3
Estate and gift taxes	1.0	-	0.3	0.4	0.3
Total	466.1	60.8	335.1	39.7	30.5

Reconciliation of Revenue to Tax Collections for the Year Ended September 30, 2018, and 2017

(In billions of dollars)	2018	2017
Consolidated revenue per the Statement of Operations and Changes in Net Position	3,384.3	3,374.6
Tax refunds	466.1	439.1
Earned income tax and child tax credit imputed revenue	(77.2)	(79.1)
Other tax credits and accrual adjustments	(56.8)	(49.0)
Federal Insurance Contributions Act - Tax	22.7	21.9
Federal Reserve earnings	(70.8)	(81.3)
Nontax-related fines and penalties reported by entities	(79.8)	(78.4)
Nontax-related earned revenue	(13.8)	(28.4)
Collections of federal tax revenue	3,574.7	3,519.4

Consolidated revenue in the Statement of Operations and Changes in Net Position is presented on a modified cash basis, net of tax refunds, and includes other non-tax related revenue. Earned Income Tax Credit, Child Tax Credit, and other tax credits amounts (unaudited) are included in gross cost in the Statements of Net Cost. The FICA – Tax paid by federal agencies is included in the Individual income and tax withholdings line in the Collections of federal tax revenue; however, it is not reported on the Statement of Operations and Changes in Net Position as these collections are intragovernmental revenue and eliminated in consolidation. The table above reconciles total revenue to federal tax collections.

Collections of Federal Revenue for the Year Ended September 30, 2017

(In billions of dollars)	Federal Tax Revenue Collections	Tax Year to Which Collections Relate 2017	2016	2015	Prior Years
Individual income tax and tax withholdings	2,976.3	1,930.0	988.6	32.3	25.4
Corporate income taxes	338.6	218.6	108.9	1.8	9.3
Excise taxes	89.4	66.7	22.5	-	0.2
Unemployment taxes	44.2	31.4	12.7	-	0.1
Customs duties	34.9	34.9	-	-	-
Estate and gift taxes	23.8	0.2	20.9	1.0	1.7
Railroad retirement taxes	6.0	4.6	1.4	-	-
Fines, penalties, interest and other revenue	6.6	6.5	0.1	-	-
Subtotal	3,519.8	2,292.9	1,155.1	35.1	36.7
Less: amounts collected for non-federal entities	(0.4)				
Total	3,519.4				

Federal Tax Refunds Disbursed for the Year Ended September 30, 2017

(In billions of dollars)	Refunds Disbursed	Tax Year to Which Refunds Relate 2017	2016	2015	Prior Years
Individual income tax and tax withholdings	389.2	46.3	306.4	27.8	8.7
Corporate income taxes	44.9	5.2	14.4	7.8	17.5
Excise taxes	2.1	0.4	1.0	0.2	0.5
Unemployment taxes	0.1	-	0.1	-	-
Customs duties	1.7	1.1	0.3	0.1	0.2
Estate and gift taxes	1.1	-	0.2	0.4	0.5
Total	439.1	53.0	322.4	36.3	27.4

Note 18. Contingencies

Financial Treatment of Loss Contingencies

Loss contingencies are existing conditions, situations, or set of circumstances involving uncertainty as to possible loss to an entity. The uncertainty will ultimately be resolved when one or more future events occur or fail to occur. The reporting of loss contingencies depends on the likelihood that a future event or events will confirm the loss or impairment of an asset or the incurrence of a liability. When a loss contingency exists, the likelihood that the future event or events will confirm the loss or the incurrence of a liability can range from probable to remote. SFFAS No. 5, *Accounting for Liabilities of the Federal Government*, identifies the probability classifications used to assess the range for the likelihood of loss as probable, reasonably possible, and remote. Loss contingencies where a past event or exchange transaction has occurred, and where a future outflow or other sacrifice of resources is assessed as probable and measurable are accrued in the financial statements. Loss contingencies that are assessed to be at least reasonably possible are disclosed in this note and loss contingencies that are assessed as remote are not reported in the financial statements, nor disclosed in the notes. The following table provides criteria for how federal entities are to account for loss contingencies, based on the likelihood of the loss and measurability.[3]

Likelihood of future outflow or other sacrifice of resources	Loss amount can be reasonably measured	Loss range can be reasonably measured	Loss amount or range cannot be reasonably measured
Probable Future confirming event(s) are more likely to occur than not.[4]	Accrue the liability. Report on Balance Sheet and Statement of Net Cost.	Accrue liability of best estimate or minimum amount in loss range if there is no best estimate, and disclose nature of contingency and range of estimated liability.	Disclose nature of contingency and include a statement that an estimate cannot be made.
Reasonably possible Possibility of future confirming event(s) occurring is more than remote and less than likely.	Disclose nature of contingency and estimated amount.	Disclose nature of contingency and estimated loss range.	Disclose nature of contingency and include a statement that an estimate cannot be made.
Remote Possibility of future event(s) occurring is slight.	No action is required.	No action is required.	No action is required.

[3] In addition, a third condition must be met to be a loss contingency: a past event or an exchange transaction must occur.

[4] For pending or threatened litigation and unasserted claims, the future confirming event or events are considered "probable" if such events are likely to occur.

The government is subject to loss contingencies that include insurance and litigation cases. These loss contingencies arise in the normal course of operations and their ultimate disposition is unknown. Based on information currently available, however, it is management's opinion that the expected outcome of these matters, individually or in the aggregate, will not have a material adverse effect on the financial statements, except for the insurance and litigation described in the following section, which could have a material adverse effect on the financial statements.

Certain significant consolidation entities apply financial accounting and reporting standards issued by FASB, and such entities, as permitted by SFFAS No. 47, are consolidated into the U.S. government's consolidated financial statements without conversion to financial and reporting standards issued by FASAB.[5] Generally, under FASAB standards, a contingency is considered "probable" if the future event or events are more likely than not to occur. Under FASB standards, a contingency is considered "probable" if the future event or events are likely to occur. "Likely to occur" is considered to be more certain than "more likely than not to occur." Under both accounting frameworks, a contingency is considered "reasonably possible" if occurrence of the future event or events is more likely than remote, but less likely than "probable" ("probable" as defined within each corresponding accounting framework).

Insurance Contingencies

At the time an insurance policy is issued, a contingency arises. The contingency is the risk of loss assumed by the insurer, that is, the risk of loss from events that may occur during the term of the policy. The government has insurance contingencies that are reasonably possible in the amount of $185.4 billion as of September 30, 2018, and $253.1 billion as of September 30, 2017. The major programs are identified below:

- PBGC reported $184.8 billion and $252.2 billion as of September 30, 2018, and 2017, respectively, for the estimated aggregate unfunded vested benefits exposure to the PBGC for private-sector single-employer and multiemployer defined benefit pension plans that are classified as a reasonably possible exposure to loss. The decrease in single employer program contingencies is primarily due to the decline in the number of companies with lower than investment grade bond ratings and/or credit scores, while the primary reason for the decrease in multiemployer program contingencies is due to 14 plans that are no longer classified as reasonably possible. Of these 14 plans, 12 were removed due to improvements in the plans' financial conditions, and the 2 remaining plans were reclassified to other categories. Please refer to the PBGC financial statements for further details.
- FDIC reported $0.3 billion and $0.6 billion as of September 30, 2018, and 2017, respectively, for identified additional risk in the financial services industry that could result in additional loss to the DIF should potentially vulnerable insured institutions ultimately fail. Actual losses, if any, will largely depend on future economic and market conditions.

Deposit Insurance

Deposit insurance covers all types of deposits received at insured financial institutions, including deposits in checking accounts, negotiable order of withdrawal accounts, savings accounts, money market deposit accounts, time deposits such as certificates of deposit, and official items issued by banks, such as cashier's checks or money orders. The insurance covers the balance of depositors' accounts, dollar-for-dollar, including principal and any accrued interest through the date of the insured financial institution's closing, up to the insurance limit. As a result, the government has the following exposure from federally-insured financial institutions:

- FDIC has estimated insured deposits of $7,376.6 billion as of September 30, 2018, and $7,092.0 billion as of September 30, 2017, for the DIF.
- NCUA has estimated insured shares of $1,132.5 billion as of September 30, 2018, and $1,080.9 billion as of September 30, 2017, for the NCUSIF.

[5] Significant consolidation entities that apply FASB standards without conversion to FASAB standards are FDIC, NCUA, PBGC, FCSIC, TVA, Smithsonian Institution, NRRIT, and USPS.

Legal Contingencies

Legal contingencies as of September 30, 2018, and 2017, are summarized in the table below:

	2018			2017		
		Estimated Range of Loss for Certain Cases [2]			Estimated Range of Loss for Certain Cases [2]	
(In billions of dollars)	Accrued Liabilities [1]	Lower End	Upper End	Accrued Liabilities [1]	Lower End	Upper End
Legal contingencies:						
Probable	11.0	10.5	12.4	7.4	6.8	8.6
Reasonably possible............	-	7.0	26.3	-	3.1	12.6

[1] Accrued liabilities are recorded and presented in other liabilities on the Balance Sheet.

[2] Does not reflect the total range of loss; many cases assessed as reasonably possible of an unfavorable outcome did not include estimated losses that could be determined.

The government is party in various administrative proceedings, legal actions, and tort claims which may ultimately result in settlements or decisions adverse to the government.

Management and legal counsel have determined that it is "probable" that some of these actions will result in a loss to the government and the loss amounts are reasonably measurable. The estimated liabilities for "probable" cases against the government are $11.0 billion and $7.4 billion as of September 30, 2018, and 2017, respectively, and are included in "Other Liabilities" on the Balance Sheet. For example, the U.S. Supreme Court decision in *Salazar v. Ramah Navajo Chapter*, dated June 18, 2012, and subsequent cases related to contract support costs have resulted in increased claims against the Indian Health Service, which is a component within HHS. As a result of this decision, many tribes have filed claims. Some claims have been paid and others have been asserted but not yet settled. It is expected that some tribes will file additional claims for prior years.

There are also administrative claims and legal actions pending where adverse decisions are considered by management and legal counsel as "reasonably possible" with an estimate of potential loss or a range of potential loss. The estimated potential losses reported for such claims and actions range from $7.0 billion to $26.3 billion as of September 30, 2018, and from $3.1 billion to $12.6 billion as of September 30, 2017. For example, as of September 30, 2018, EPA has received approximately 403 total claims under the *Federal Tort Claims Act* from individuals and businesses situated on or near waterways affected by acid mine water released by Colorado's Gold King Mine in August of 2015. The claims allege lost wages, loss of business income, agricultural and livestock losses, property damage, diminished property value, and personal injury. In addition, EPA has received claims from individuals under the *Federal Tort Claims Act* for alleged injuries and property damages caused by EPA's alleged negligence related to the water health crisis in Flint, Michigan. The estimated losses related to the Gold King Mine and the water health crisis are $2.1 billion and $2.8 billion, respectively. EPA has determined there is a reasonably possible likelihood of unfavorable outcome for these cases.

Numerous litigation cases are pending where the outcome is uncertain or it is reasonably possible that a loss has been incurred and where estimates cannot be made. There are other litigation cases where the plaintiffs have not made claims for specific dollar amounts, but the settlement may be significant. The ultimate resolution of these legal actions for which the potential loss could not be determined may materially affect the U.S. government's financial position or operating results. An example of a specific case is summarized below:

- A number of plaintiffs filed claims in the U.S. Court of Federal Claims requesting that Treasury redeem matured savings bonds not possessed by the applicable states, but which have registered owners with last known addresses in those states. Treasury informed the applicable states it would not redeem these savings bonds since those states are not registered owners of the bonds. On August 20, 2015, the U.S. Court of Federal Claims partially dismissed one claim and denied the U.S. government's motion to dismiss with respect to other claims. On August 8, 2017, the court ruled in favor of two states, and the U.S. government has appealed. At this time, the government is unable to determine the likelihood of an unfavorable outcome or make an estimate of potential loss.

Environmental and Disposal Contingencies

Environmental and disposal contingencies as of September 30, 2018, and 2017, are summarized in the table below:

	2018			2017		
		Estimated Range of Loss for Certain Cases [2]			Estimated Range of Loss for Certain Cases [2]	
(In billions of dollars)	Accrued Liabilities [1]	Lower End	Upper End	Accrued Liabilities [1]	Lower End	Upper End
Environmental and disposal contingencies:						
Probable	30.2	29.5	31.4	28.4	27.7	29.5
Reasonably possible............	-	0.6	0.8	-	0.7	1.5

[1] Accrued liabilities are recorded and presented in other liabilities on the Balance Sheet.

[2] Does not reflect the total range of loss; many cases assessed as reasonably possible of an unfavorable outcome did not include estimated losses that could be determined.

The government is subject to loss contingencies for a variety of environmental cleanup costs for the storage and disposal of hazardous material as well as the operations and closures of facilities at which environmental contamination may be present.

Management and legal counsel have determined that it is "probable" that some of these actions will result in a loss to the government and the loss amounts are reasonably measurable. The estimated liabilities for these cases are $30.2 billion and $28.4 billion as of September 30, 2018, and 2017, respectively, and are included in "Other Liabilities" on the Balance Sheet.

In accordance with the *Nuclear Waste Policy Act of 1982* (NWPA), DOE entered into more than 68 standard contracts with utilities in which, in return for payment of fees into the Nuclear Waste Fund, DOE agreed to begin disposal of spent nuclear fuel (SNF) by January 31, 1998. Because DOE has no facility available to receive SNF under the NWPA, it has been unable to begin disposal of the utilities' SNF as required by the contracts. Therefore, DOE is subject to significant SNF litigation claiming damages for partial breach of contract as a result of this delay. Based on settlement estimates, the total liability estimate as of September 30, 2018 is $35.5 billion. After deducting the cumulative amount paid of $7.4 billion as of September 30, 2018 under settlements, and as a result of final judgments, the remaining liability is estimated to be approximately $28.1 billion, compared to approximately $27.2 billion as of September 30, 2017. In addition to its SNF litigation, a number of class action and/or multiple plaintiff tort suits have been filed against current and former DOE contractors in which the plaintiffs seek damages for alleged exposures to radioactive and/or toxic substances as a result of the historic operations of DOE's nuclear facilities. Collectively, damages in excess of $1.1 billion are currently being sought in these cases.

Other Contingencies

DOT, HHS, and Treasury reported the following other contingencies:

- The Federal Highway Administration (FHWA) preauthorizes states to establish construction budgets without having received appropriations from Congress for such projects. FHWA has authority to approve projects using advance construction under 23 U.S.C. 115(a). FHWA does not guarantee the ultimate funding to the states for these "advance construction" projects and, accordingly, does not obligate any funds for these projects. When funding becomes available to FHWA, the states can then apply for reimbursement of costs that they have incurred on such projects, at which time FHWA can accept or reject such requests. As of September 30, 2018, and 2017, FHWA has pre-authorized $60.8 billion and $55.2 billion, respectively, under these arrangements. Congress has not provided appropriations for these projects and no liability is accrued in the DOT consolidated financial statements.
- Contingent liabilities have been established as a result of Medicaid audit and program disallowances that are currently being appealed by the states. The Medicaid amounts are $6.3 billion and $12.2 billion for fiscal years ending September 30, 2018, and 2017, respectively. The states could return the funds through payments to HHS, or

HHS could recoup the funds by reducing future grant awards to the states. Conversely, if the appeals are decided in favor of the states, HHS will be required to pay these amounts. In addition, certain amounts for payment have been deferred under the Medicaid program when there is reasonable doubt as to the legitimacy of expenditures claimed by a state. There are also outstanding reviews of the state expenditures in which a final determination has not been made.

- As part of an annual process, Treasury assesses the need to estimate and accrue a contingent liability to the GSEs to reflect the forecasted equity deficits of the GSEs. Based on this assessment, it was estimated there were no probable future funding draws as of September 30, 2018, and 2017, and therefore, no contingent liability was accrued. However, as of September 30, 2018, it is reasonably possible that market volatility or non-recurring events—for instance, changes to accounting policies that impact credit loss provisions—could potentially cause the GSEs to generate quarterly losses and, therefore, result in future funding draws against Treasury's funding commitment. Due to challenges quantifying future market volatility or the timing, magnitude, and likelihood of non-recurring events, an estimate of the total amount of this reasonably possible future funding liability could not be made as of September 30, 2018. See Note 8—Investments in Government-Sponsored Enterprises for further information.

Treaties and Other International Agreements

The government is a party to treaties and other international agreements. These treaties and other international agreements address various issues including, but not limited to, trade, commerce, security, and law enforcement that may involve financial obligations or give rise to possible exposure to losses. When a contingency originates from the U.S. government's involvement in a treaty or other international agreement, the responsible reporting entity must establish a contingent liability, include a required note disclosure to its financial statements, or both, in accordance with guidance in SFFAS No. 5, as amended. A review of potential contingent liabilities arising from litigation related to treaties and other international agreements has been conducted by U.S. government entities. This entity-level review, along with any resulting relevant information, is captured and reported in the annual legal representation letter process and, if applicable, disclosed in the Legal Contingencies section of this note.

Note 19. Commitments

Long-Term Operating Leases as of September 30, 2018, and 2017

(In billions of dollars)	2018	2017
General Services Administration	21.6	22.4
U.S. Postal Service	3.5	7.6
Department of State	1.4	1.6
Department of Defense	0.9	1.0
Department of Health and Human Services	0.8	1.0
Other operating leases	3.9	3.5
Total long-term operating leases	32.1	37.1

The government has entered into contractual commitments that require future use of financial resources. It has significant amounts of long-term lease obligations.

Undelivered Orders and Other Commitments as of September 30, 2018, and 2017

(In billions of dollars)	2018	Restated 2017
Undelivered Orders:		
Department of Defense	319.8	263.8
Security Assistance Accounts	168.4	140.8
Department of Education	132.7	128.1
Department of Health and Human Services	122.7	114.2
Department of Transportation	110.5	103.7
Department of Agriculture	58.3	62.0
Department of Housing and Urban Development	48.9	39.1
Department of Homeland Security	42.3	37.9
Department of Energy	27.0	22.8
Department of State	24.0	21.8
U.S. Agency for International Development	17.4	17.9
All other entities	126.6	126.0
Total undelivered orders	1,198.6	1,078.1
Other Commitments:		
GSE Senior Preferred Stock Purchase Agreements	254.1	258.1
U.S. Participation in the International Monetary Fund	154.9	157.0
Callable Capital Subscriptions for Multilateral Development Banks	121.1	120.6
All other commitments	22.4	30.0
Total other commitments	552.5	565.7

Undelivered Orders and Other Commitments

Undelivered Orders

Undelivered orders represent the value of goods and services ordered that have not yet been received. As of September 30, 2018, and 2017, DOD reported undelivered orders of $319.8 billion and $263.8 billion, respectively. The $56.0 billion increase primarily resulted from an increase in activity (available budgetary resources) and continued refinement of estimation methods used in the classification of non-federal undelivered orders.

Certain amounts related to DOJ have been restated. Refer to Note 1.U—Restatements for more information.

GSE Senior Preferred Stock Purchase Agreements

At September 30, 2018 and 2017, the maximum remaining potential commitment to the GSEs for the remaining life of the SPSPAs was $254.1 billion and $258.1 billion, respectively, which was established on December 31, 2012. Refer to Note 8—Investments in Government-Sponsored Enterprises for a full description of the SPSPAs related commitments and contingent liability, if any, as well as additional information.

U.S. Participation in the International Monetary Fund

The government participates in the IMF through a quota subscription and certain borrowing arrangements that supplement IMF resources. As of September 30, 2018, and 2017, the financial commitment under the U.S. quota and borrowing arrangements was $154.9 billion and $157.0 billion, respectively. Refer to Note 2—Cash and Other Monetary Assets for more information regarding the U.S. participation in the IMF.

Callable Capital Subscriptions for Multilateral Development Banks

The government has callable subscriptions in certain MDBs, which are international financial institutions that finance economic and social development projects in developing countries. Callable capital in the MDBs serves as a supplemental pool of resources that may be redeemed and converted into ordinary paid in shares, if the MDB cannot otherwise meet certain obligations through its other available resources. MDBs are able to use callable capital as backing to obtain favorable financing terms when borrowing from international capital markets. To date, there has never been a call on this capital at any MDBs and none is anticipated. As of September 30, 2018, and 2017, the capital commitment to MDBs was $121.1 billion and $120.6 billion, respectively.

All Other Commitments

Certain amounts related to Treasury have been restated. Refer to Note 1.U—Restatements for more information.

Other Risks

Terrorism Risk Insurance Program

Congress originally enacted the *Terrorism Risk Insurance Act* in November 2002 to address market disruptions resulting from terrorist attacks on September 11, 2001. Most recently, the *Terrorism Risk Insurance Program Reauthorization Act of 2015* extended the Terrorism Risk Insurance Program (TRIP) until December 31, 2020. The TRIP helps to ensure available and affordable commercial property and casualty insurance for terrorism risk, and simultaneously allows private markets to stabilize. The authority to pay claims under the TRIP Program is activated when the Secretary of the Treasury (in consultation with the Secretary of the Department of Homeland Security and the U.S. Attorney General) certifies an "act of terrorism." In the event of certification of an "act of terrorism" insurers may be eligible to receive reimbursement from the U.S. government for associated insured losses assuming an aggregate insured loss threshold ("program trigger") has been reached once a particular insurer has satisfied its designated deductible amount. For calendar years 2018 and 2017, the program trigger amount was $160.0 million and $140.0 million, respectively. This amount will increase by $20.0 million annually through calendar year 2020. Insured losses above insurer deductibles will be shared between insurance companies and the U.S. government. The TRIP includes both mandatory and discretionary authority for Treasury to recoup federal payments made under the TRIP through policyholder surcharges under certain circumstances, and contains provisions designed to manage litigation arising from or relating to a certified act of terrorism. There were no claims under the TRIP as of September 30, 2018 or 2017.

U.S. Contributions to International Organizations

The U.S. government enters into agreements to pay future contributions to international organizations in which it participates as a member. These contributions may include financial and in-kind support, including assessed contributions, voluntary contributions, grants, and other assistance to international organizations. Following are examples of international organizations and their underlying missions which are supported by U.S. contributions:

- Office of the United Nations High Commissioner for Refugees, which supports annual and supplementary appeals for Africa, East Asia, Europe, Near East, South Asia, and the Western Hemisphere, as well as protection activities, refugee resettlement, and the global HIV/AIDS initiative;
- International Committee of the Red Cross, which aids in annual emergency and budget extension appeals for Africa, East Asia, Europe, Near East, South Asia, and the Western Hemisphere to support protection and assistance for conflict-affected populations;
- International Organization for Migration, which supports migration programs and the U.S. Refugee Assistance Program;
- North Atlantic Treaty Organization, which promotes conflict prevention and peaceful resolution of disputes;
- United Nations, which enables the world's nations to work together toward freedom, democracy, peace, and human rights;
- World Food Program, which provides emergency nutrition programming;
- Global Environment Facility, which is a multilateral trust fund that provides grants for global environmental projects;
- Green Climate Fund, established to support the efforts of developing countries to respond to the challenge of climate change;
- United Nations Children's Fund, which promotes humanitarian and developmental assistance to children and mothers in developing countries; and
- World Health Organization, which provides support for collaborative efforts in a wide range of health-related activities, including infectious diseases, maternal and child health, family planning, safe motherhood, newborn health, reproductive health, environmental health, and HIV/AIDS.

Note 20. Funds from Dedicated Collections

Funds from Dedicated Collections as of September 30, 2018[1]

(In billions of dollars)	Federal Old-Age and Survivors Insurance Trust Fund	Federal Hospital Insurance Trust Fund (Medicare Part A)	Federal Disability Insurance Trust Fund	Federal Supplementary Medical Insurance Trust Fund (Medicare Parts B and D)	All Other Funds from Dedicated Collections	Total Funds from Dedicated Collections (Combined)
Assets:						
Cash and other monetary assets	-	-	-	-	65.9	65.9
Fund balance with Treasury	(0.2)	1.6	(0.3)	25.8	149.9	176.8
Investments in U.S. Treasury securities, net of unamortized premiums/discounts	2,801.3	202.8	93.4	98.2	272.1	3,467.8
Other federal assets	19.9	38.7	0.7	35.9	24.6	119.8
Non-federal assets	2.6	1.2	5.1	17.4	110.9	137.2
Total assets	2,823.6	244.3	98.9	177.3	623.4	3,967.5
Liabilities and net position:						
Due and payable to beneficiaries	75.3	31.5	25.1	30.7	2.1	164.7
Other federal liabilities	5.6	39.6	0.9	42.6	66.5	155.2
Other non-federal liabilities	-	1.1	-	0.8	183.7	185.6
Total liabilities	80.9	72.2	26.0	74.1	252.3	505.5
Total net position	2,742.7	172.1	72.9	103.2	371.1	3,462.0
Total liabilities and net position	2,823.6	244.3	98.9	177.3	623.4	3,967.5
Change in net position:						
Beginning net position	2,766.6	178.4	46.3	98.6	329.6	3,419.5
Adjustments to beginning net position	-	-	-	-	2.6	2.6
Beginning net position, adjusted	2,766.6	178.4	46.3	98.6	332.2	3,422.1
Investment revenue	81.1	7.2	2.4	2.4	5.4	98.5
Individual income taxes	706.1	264.6	167.0	-	-	1,137.7
Other taxes and miscellaneous earned revenue	-	0.6	-	4.1	138.5	143.2
Other changes in fund balance (e.g., appropriations, transfers)	26.3	23.5	(1.6)	312.8	11.8	372.8
Total financing sources	813.5	295.9	167.8	319.3	155.7	1,752.2
Program gross costs and non-program expenses	837.4	306.2	141.2	411.0	171.5	1,867.3
Less: program revenue	-	(4.0)	-	(96.3)	(54.7)	(155.0)
Net cost	837.4	302.2	141.2	314.7	116.8	1,712.3
Ending net position	2,742.7	172.1	72.9	103.2	371.1	3,462.0

[1]By law, certain expenses (costs), revenues, and other financing sources related to the administration of the above funds are not charged to the funds and are therefore financed and/or credited to other sources.

Funds from Dedicated Collections as of September 30, 2017 (Restated)[1]

(In billions of dollars)	Federal Old-Age and Survivors Insurance Trust Fund	Federal Hospital Insurance Trust Fund (Medicare Part A)	Federal Disability Insurance Trust Fund	Federal Supplementary Medical Insurance Trust Fund (Medicare Parts B and D)	All Other Funds from Dedicated Collections	Total Funds from Dedicated Collections (Combined)
Assets:						
Cash and other monetary assets	-	-	-	-	65.0	65.0
Fund balance with Treasury	(0.1)	0.8	(0.2)	27.5	139.2	167.2
Investments in U.S. Treasury securities, net of unamortized premiums/discounts	2,820.2	197.8	69.7	70.6	271.6	3,429.9
Other federal assets	20.4	37.9	0.5	36.0	18.5	113.3
Non-federal assets	2.5	11.7	4.8	39.0	112.1	170.1
Total assets	2,843.0	248.2	74.8	173.1	606.4	3,945.5
Liabilities and net position:						
Due and payable to beneficiaries	71.3	30.1	27.4	30.6	14.8	174.2
Other federal liabilities	5.1	38.6	1.1	43.2	72.6	160.6
Other non-federal liabilities	-	1.1	-	0.7	189.4	191.2
Total liabilities	76.4	69.8	28.5	74.5	276.8	526.0
Total net position	2,766.6	178.4	46.3	98.6	329.6	3,419.5
Total liabilities and net position	2,843.0	248.2	74.8	173.1	606.4	3,945.5
Change in net position:						
Beginning net position	2,746.4	174.1	20.8	94.5	338.5	3,374.3
Adjustments to beginning net position	-	-	-	-	0.2	0.2
Beginning net position, adjusted	2,746.4	174.1	20.8	94.5	338.7	3,374.5
Investment revenue	84.1	7.4	1.7	2.4	4.0	99.6
Individual income taxes	702.1	259.7	166.0	-	-	1,127.8
Other taxes and miscellaneous earned revenue	-	0.5	-	4.2	142.3	147.0
Other changes in fund balance (e.g., appropriations, transfers)	27.7	23.4	(0.8)	278.0	(1.1)	327.2
Total financing sources	813.9	291.0	166.9	284.6	145.2	1,701.6
Program gross cost and non-program expenses	793.7	290.8	141.4	366.1	205.4	1,797.4
Less: program revenue	-	(4.1)	-	(85.6)	(51.1)	(140.8)
Net cost	793.7	286.7	141.4	280.5	154.3	1,656.6
Ending net position	2,766.6	178.4	46.3	98.6	329.6	3,419.5

[1]By law, certain expenses (costs), revenues, and other financing sources related to the administration of the above funds are not charged to the funds and are therefore financed and/or credited to other sources.

Generally, funds from dedicated collections are financed by specifically identified revenues, often supplemented by other financing sources, provided to the government by non-federal sources, which remain available over time. These specifically identified revenues and other financing sources are required by statute to be used for designated activities, benefits, or purposes and must be accounted for separately from the government's general revenues. Funds from dedicated collections generally include trust funds, public enterprise revolving funds (not including credit reform financing funds), and special funds. Funds from dedicated collections specifically exclude any fund established to account for pensions, ORB, OPEB, or other benefits provided for federal employees (civilian and military). In the federal budget, the term "trust fund" means only that the law requires a particular fund be accounted for separately, used only for a specified purpose, and designated as a trust fund. A change in law may change the future receipts and the terms under which the fund's resources are spent. In the private sector, trust fund refers to funds of one party held and managed by a second party (the trustee) in a fiduciary capacity. The activity of funds from dedicated collections differs from fiduciary activities primarily in that assets within funds from dedicated collections are government-owned. For further information related to fiduciary activities, see Note 21—Fiduciary Activities.

Public enterprise revolving funds include expenditure accounts authorized by law to be credited with offsetting collections, mostly from the public, that are generated by and dedicated to finance a continuing cycle of business-type operations. Some of the financing for these funds may be from appropriations.

Special funds are federal funds dedicated by law for a specific purpose. Special funds include the special fund receipt account and the special fund expenditure account.

The tables above depict major funds from dedicated collections chosen based on their significant financial activity and importance to taxpayers. All other government funds from dedicated collections not shown separately are aggregated as "all other."

Total assets represent the unexpended balance from all sources of receipts and amounts due to the funds from dedicated collections, regardless of source, including related governmental transactions. These are transactions between two different entities within the government (for example, monies received by one entity of the government from another entity of the government).

The intragovernmental assets are comprised of fund balances with Treasury, investments in Treasury securities—including unamortized amounts, and other assets that include the related accrued interest receivable on federal investments. These amounts were eliminated in preparing the principal financial statements. The non-federal assets represent only the activity with individuals and organizations outside of the government.

Most of the assets within funds from dedicated collections are invested in intragovernmental debt holdings. The government does not set aside assets to pay future benefits or other expenditures associated with funds from dedicated collections. The cash receipts collected from the public for funds from dedicated collections are deposited in the General Fund, which uses the cash for general government purposes. Treasury securities are issued to federal entities as evidence of its receipts. Treasury securities are an asset to the federal entities and a liability to the U.S. Treasury and, therefore, they do not represent an asset or a liability in the *Financial Report*. These securities require redemption if a fund's disbursements exceeds its receipts. Redeeming these securities will increase the government's financing needs and require more borrowing from the public (or less repayment of debt), or will result in higher taxes than otherwise would have been needed, or less spending on other programs than otherwise would have occurred, or some combination thereof. See Note 11—Federal Debt Securities Held by the Public and Accrued Interest for further information related to the investments in federal debt securities.

Depicted below is a description of the major funds from dedicated collections shown in the above tables, which also identifies the government entities that administer each particular fund. For detailed information regarding these funds from dedicated collections, please refer to the financial statements of the corresponding administering entities. For information on the benefits due and payable liability associated with certain funds from dedicated collections, see Note 14—Benefits Due and Payable.

Federal Old-Age and Survivors Insurance Trust Fund

The Federal Old-Age and Survivors Insurance (OASI) Trust Fund, administered by the SSA, provides retirement and survivors benefits to qualified workers and their families.

Payroll and self-employment taxes primarily fund the OASI Trust Fund. Interest earnings on Treasury securities, federal entities' payments for the Social Security benefits earned by military and federal civilian employees, and Treasury payments for a portion of income taxes collected on Social Security benefits provide the fund with additional income. The law establishing the OASI Trust Fund and authorizing the depositing of amounts to the credit of the fund is set forth in 42 U.S.C. § 401.

Federal Hospital Insurance Trust Fund (Medicare Part A)

The Federal Hospital Insurance (HI) Trust Fund, administered by HHS, finances the HI (Medicare Part A). This program funds the cost of inpatient hospital and related care for individuals age 65 or older who meet certain insured status requirements and individuals younger than age 65 with certain disabilities.

The HI Trust Fund is financed primarily by payroll taxes, including those paid by federal entities. It also receives income from interest earnings on Treasury securities, a portion of income taxes collected on Social Security benefits, premiums paid by, or on behalf of, aged uninsured beneficiaries, and receipts from fraud and abuse control activities. Section 1817 of the *Social Security Act* established the Medicare Hospital Trust Fund.

Federal Disability Insurance Trust Fund

The Federal Disability Insurance (DI) Trust Fund, administered by SSA, provides assistance and protection against the loss of earnings due to a wage earner's disability in form of monetary payments.

Like the OASI Trust Fund, payroll taxes primarily fund the DI Trust Fund. The fund also receives income from interest earnings on Treasury securities, federal entities' payments for the Social Security benefits earned by military and federal civilian employees, and Treasury payments for a portion of income taxes collected on Social Security benefits. The law establishing the DI Trust Fund and authorizing the depositing of amounts to the credit of the fund is set forth in 42 U.S.C. § 401.

Federal Supplementary Medical Insurance Trust Fund (Medicare Parts B and D)

The Federal SMI Trust Fund, administered by HHS, finances the SMI Program (Medicare Part B) and the Medicare Prescription Drug Benefit Program (Medicare Part D). These programs provide supplementary medical insurance for enrolled eligible participants to cover physician and outpatient services not covered by Medicare Part A and to obtain qualified prescription drug coverage, respectively. Medicare Part B financing is not based on payroll taxes; it is primarily based on monthly premiums, income from the General Fund, and interest earnings on Treasury securities. The Medicare SMI Trust Fund was established by Section 1841 of the *Social Security Act*.

Medicare Part D was created by the *Medicare Modernization Act of 2003* (P.L. No. 108-173). Medicare Part D financing is similar to Part B; it is primarily based on monthly premiums and income from the General Fund, not on payroll taxes. The fund also receives transfers from states.

All Other Funds from Dedicated Collections

The government is responsible for the management of numerous funds from dedicated collections that serve a wide variety of purposes. The funds from dedicated collections presented on an individual basis in the above tables represent the majority of the government's net position attributable to funds from dedicated collections. All other activity attributable to funds from dedicated collections is aggregated in accordance with SFFAS No. 27, *Identifying and Reporting Funds from Dedicated Collections,* as amended by SFFAS No. 43, *Funds from Dedicated Collections: Amending Statement of Federal Financial Accounting Standards 27, Identifying and Reporting Earmarked Funds*. The funds from dedicated collections within the "all other" aggregate, along with the entities that administer them, include the following:

- Highway Trust Fund and Airport and Airway Trust Fund—administered by DOT.
- Unemployment Trust Fund (UTF) and Black Lung Disability Trust Fund (BLDTF)—administered by DOL.
- Land and Water Conservation Fund, Reclamation Fund, and Water and Related Resources Fund—administered by DOI.
- ESF—administered by Treasury.
- NFIP—administered by DHS.

- Railroad Retirement Trust Fund—administered by RRB.
- Uranium Enrichment Decontamination and Decommissioning Fund—administered by DOE.
- Government National Mortgage Association—administered by HUD.
- Crime Victims Fund—administered by DOJ.
- Harbor Maintenance Trust Fund—administered by DOD.

In accordance with SFFAS No. 43, any funds established to account for pension, other retirement, or other post-employment benefits to civilian or military personnel are excluded from the reporting requirements related to funds from dedicated collections.

Smithsonian Institution comprised the $2.6 billion adjustment to beginning net position for fiscal year 2018. Gulf Coast Ecosystem Restoration Council and HUD contributed to the $0.2 billion in adjustments to beginning net position for fiscal year 2017. Refer to Note 1.S—Adjustments to Beginning Net Position for more information. Certain amounts related to HUD have been restated. Refer to Note 1.U—Restatements for more information.

Other Taxes and Miscellaneous Earned Income

Unemployment Taxes

The UTF, within the "all other" aggregate, represents all the unemployment tax revenues attributable to funds from dedicated collections shown on the consolidated Statement of Operations and Changes in Net Position.

The UTF provides temporary assistance to workers who lose their jobs. The program is administered through a unique system of federal and state partnerships, established in federal law, but executed through conforming state laws by state officials. DOL administers the federal operations of the program.

Employer taxes provide the primary funding source for the UTF and constitute the largest portion of unemployment tax revenues attributable to funds from dedicated collections as shown on the consolidated Statement of Operations and Changes in Net Position. However, interest earnings on Treasury securities also provide income to the fund. For the years ending September 30, 2018, and 2017, UTF unemployment tax revenues were $43.2 billion and $44.1 billion, respectively. Appropriations have supplemented the fund's income during periods of high and extended unemployment. The UTF was established under the authority of Section 904 of the *Social Security Act of 1935*.

Excise Taxes

There are 9 funds from dedicated collections within the "all other" aggregate that represent 94 percent of the dedicated excise tax revenue attributable to funds from dedicated collections shown on the consolidated Statement of Operations and Changes in Net Position. The Highway Trust Fund and the Airport and Airway Trust Fund, combined, represent 96 percent of the "all other" dedicated excise tax revenues. Both of these funds are administered by the DOT. For more information, please refer to DOT's financial statements.

The Highway Trust Fund was established to promote domestic interstate transportation and to move people and goods. The fund provides federal grants to states for highway construction, certain transit programs, and related transportation purposes. The Highway Trust Fund was created by the *Highway Revenue Act of 1956*. Funding sources include designated excise taxes on gasoline and other fuels, the initial sale of heavy trucks, and highway use by commercial motor vehicles. For the years ending September 30, 2018, and 2017, Highway Trust Fund excise tax revenues were $42.6 billion and $41.0 billion, respectively. As funds are needed for payments, the Highway Trust Fund corpus investments are liquidated and funds are transferred to the FHWA, the Federal Transit Administration, or other DOT entities, for payment of obligations.

The Airport and Airway Trust Fund provides for airport improvement and airport facilities maintenance. It also funds airport equipment, research, and a portion of the Federal Aviation Administration's administrative operational support. The Airport and Airway Trust Fund was authorized by the *Airport and Airway Revenue Act of 1970*. Funding sources include aviation-related excise tax collections from:

- Passenger tickets,
- Passenger flight segments,
- International arrival/departures,
- Cargo waybills, and
- Aviation fuels.

For the years ending September 30, 2018, and 2017, Airport and Airway Trust Fund excise tax revenues were $15.8 billion and $15.1 billion, respectively.

Miscellaneous Earned Revenues

Miscellaneous earned revenues due to activity attributable to funds from dedicated collections primarily related to royalties retained by various funds within DOI.

Note 21. Fiduciary Activities

Fiduciary activities are the collection or receipt, and the management, protection, accounting, investment and disposition by the government of cash or other assets in which non-federal individuals or entities have an ownership interest that the government must uphold. Fiduciary cash and other assets are not assets of the government and are not recognized on the consolidated Balance Sheet. Examples of the government's fiduciary activities include the TSP, which is administered by the FRTIB, and the Indian Tribal and individual Indian Trust Funds, which are administered by the DOI.

Schedule of Fiduciary Net Assets as of September 30, 2018, and 2017

(In billions of dollars)	2018	2017
Thrift Savings Plan	589.0	531.5
Department of the Interior	5.4	5.2
All other	5.2	6.6
Total fiduciary net assets	599.6	543.3

In accordance with the requirements of SFFAS No. 31, *Accounting for Fiduciary Activities,* fiduciary investments in Treasury securities and fund balance with Treasury held by fiduciary funds are to be recognized on the Balance Sheet as debt held by the public and a liability for fiduciary fund balance with Treasury, respectively.

As of September 30, 2018, total fiduciary investments in Treasury securities and in non-Treasury securities are $250.3 billion and $363.0 billion, respectively. As of September 30, 2017, total fiduciary investments in Treasury securities and in non-Treasury securities were $223.7 billion and $317.9 billion, respectively. Refer to Note 11—Federal Debt Securities Held by the Public and Accrued Interest for more information on the Treasury securities.

As of September 30, 2018, and 2017, the total fiduciary fund balance with Treasury is $1.8 billion and $1.2 billion, respectively. A liability for this fiduciary fund balance with Treasury is reflected as other miscellaneous liabilities in Note 16—Other Liabilities.

As of September 30, 2018, and 2017, collectively, the fiduciary investments in Treasury securities and fiduciary fund balance with Treasury held by all government entities represent $6.6 billion and $7.0 billion, respectively, of unrestricted cash included within cash held by Treasury for governmentwide operations shown in Note 2—Cash and Other Monetary Assets.

Thrift Savings Plan

The Thrift Savings Fund (TSF) maintains and holds in trust the assets of the TSP. The TSP is administered by an independent government entity, the FRTIB, which is charged with operating the TSP prudently and solely in the interest of the participants and their beneficiaries.

The TSP is a retirement savings and investment plan for federal employees and members of the uniformed services. It was authorized by the U.S. Congress in the *Federal Employees' Retirement System Act of 1986*. The Plan provides federal employees and members of the uniformed services with a savings and tax benefit similar to what many private sector employers offer their employees under 401(k) plans. The Plan was primarily designed to be a key part of the retirement package (along with a basic annuity benefit and Social Security) for employees who are covered by FERS.

As of September 30, 2018, and 2017, the TSP held $589.0 billion and $531.5 billion, respectively, in net assets, which included $245.5 billion and $217.9 billion, respectively, of Treasury securities. The TSF combines the net assets of the TSP and the FRTIB in its financial statements. Only the TSP net assets of the TSF financial statements are disclosed in this note. The most recent audited financial statements for the TSF are as of December 31, 2017, and 2016. For further information about FRTIB and the TSP, please refer to the FRTIB website at https://www.frtib.gov.

DOI–Indian Trust Funds

As stated above, DOI has responsibility for the assets held in trust on behalf of American Indian Tribes and individuals. DOI maintains accounts for Tribal and Other Trust Funds (including the Alaska Native Escrow Fund) and Individual Indian Monies (IIM) Trust Funds in accordance with the *American Indian Trust Fund Management Reform Act of 1994*. The fiduciary balances that have accumulated in these funds have resulted from land use agreements, royalties on natural resource depletion, other proceeds derived directly from trust resources, judgment awards, settlements of claims, and investment income. These funds are maintained for the benefit of individual Native Americans as well as for designated Indian tribes. DOI maintains separate financial statements for these trust funds, which are prepared using a cash or modified cash basis of accounting, a comprehensive basis of accounting other than GAAP. The independent auditors' reports on the Tribal and Other Trust Funds were qualified as it was not practical to extend audit procedures sufficiently to satisfy themselves as to the fairness of the trust fund balances. The IIM Trust Funds received an unmodified opinion from the auditors. As of September 30, 2018, and 2017, the DOI held $5.4 billion and $5.2 billion, respectively, in net assets. For further information related to these assets, please refer to the DOI website at https://www.doi.gov.

All Other Entities with Fiduciary Activities

The government is responsible for the management of other fiduciary net assets on behalf of various non-federal entities. The component entities presented individually in the table on the previous page represent the vast majority of the government's fiduciary net assets. All other component entities with fiduciary net assets are aggregated in accordance with SFFAS No. 31. As of September 30, 2018, and 2017, including TSP and DOI, there are a total of 19 and 20 federal entities, respectively, with fiduciary activities at a grand total of 65 and 67 fiduciary funds, respectively. SBA and Library of Congress (LOC) are the significant entities relating to the fiduciary activities of the remaining component entities within the "all other" aggregate balance. As of September 30, 2018, "all other" fiduciary net assets were $5.2 billion, compared to $6.6 billion as of September 30, 2017.

Note 22. Social Insurance

SOSI presents the projected actuarial present value of the estimated future revenue and estimated future expenditures of the Social Security, Medicare, Railroad Retirement, and Black Lung social insurance programs which are administered by the SSA, HHS, RRB, and DOL, respectively. These estimates are based on the intermediate economic and demographic assumptions presented later in this note as set forth in the relevant Social Security and Medicare trustees' reports and in the agency financial reports of HHS, SSA, and DOL, as well as in the relevant entity performance and accountability report for RRB. Due to a change in the presentation of the consolidated SOSI and this note from billions of dollars to trillions of dollars beginning in fiscal year 2016, some amounts in the narrative will not be traceable to the corresponding entity financial statements. The SOSI projections, with one exception related to Medicare Part A and OASDI, are based on current law; that is, they assume that scheduled social insurance benefit payments would continue after related trust funds are projected to be depleted, contrary to current law. By law, once assets are depleted, expenditures cannot be made except to the extent covered by ongoing tax receipts and other trust fund income. The estimates in the consolidated SOSI of the open group measures are for persons who are participants or eventually will participate in the programs as contributors (workers) or beneficiaries (retired workers, survivors, dependents, and disabled) during the 75-year projection period. To enhance comparability of the BLDTF social insurance information and continue to illustrate the fund's long-term condition and sustainability, DOL revised its projection period from a fixed terminus of September 30, 2040 to a rolling 25-year projection period that begins on the September 30 valuation date each year. The revised projection period became effective for the September 30, 2017 valuation date and continued for fiscal year 2018.

Contributions consist of: payroll taxes from employers, employees, and self-employed persons; revenue from federal income taxation of OASDI and railroad retirement benefits; excise tax on the domestic sale of coal (Black Lung); premiums from, and state transfers on behalf of, participants in Medicare; and reimbursements from the General Fund to the OASDI Trust Funds to make up for reductions in payroll tax revenue due to temporary payroll tax rate reductions. Income for all programs is presented from a consolidated perspective. Future interest payments and other future intragovernmental transfers have been excluded upon consolidation. By accounting convention, intragovernmental transactions are eliminated in the consolidation process, and accordingly, the Statements of Social Insurance do not include projected general revenues that, under current law, would be used to finance the remainder of the expenditures in excess of revenues for Medicare Parts B and D that is reported in the Statements of Social Insurance. Expenditures include benefit payments scheduled under current law and administrative expenses. Current Social Security and Medicare law provides for full benefit payments only to the extent that there are sufficient balances in the trust funds. Expenditures reflect full benefit payments even after the point at which assets are projected to be depleted.

Actuarial present values of estimated future income (excluding interest) and estimated future expenditures for the Social Security and Medicare social insurance programs are presented for three different groups of participants: (1) current participants who have not yet attained eligibility age; (2) current participants who have attained eligibility age; and (3) new entrants, who are expected to become participants in the future. Current participants in the Social Security and Medicare programs are the "closed group" of taxpayers and/or beneficiaries who are at least age 15 years at the start of the projection period. Since the projection period for the Social Security, Medicare, and Railroad Retirement social insurance programs consists of 75 years, the period covers virtually all of the current participants' working and retirement years, a period that could be greater than 75 years in a relatively small number of instances. Future participants for Social Security and Medicare include births during the projection period and individuals below age 15 as of January 1 of the valuation year. Railroad Retirement's future participants are the projected new entrants as of October 1 of the valuation year. For fiscal year 2015 and years prior, future participants for Railroad Retirement were the projected new entrants as of January 1 of the valuation year[6].

The present values of estimated future expenditures in excess of estimated future revenue are calculated by subtracting the actuarial present values of future scheduled contributions as well as dedicated tax income by and on behalf of current and future participants from the actuarial present value of the future scheduled benefit payments to them or on their behalf. To determine a program's funding shortfall over any given period of time, the starting trust fund balance is subtracted from the present value of expenditures in excess of revenues over the period.

The trust fund balances as of the valuation date for the respective programs, including interest earned, are shown in the table below[7]. Substantially all of the OASDI, HI, and SMI Trust Fund balances consist of investments in special nonmarketable Treasury securities that are backed by the full faith and credit of the U.S. government. For more information, see Note 20—Funds from Dedicated Collections.

[6] Beginning with the fiscal year 2016 reporting period, the valuation date for the Railroad Retirement program was changed from calendar year to fiscal year.
[7] Trust fund balances for the Railroad Retirement and Black Lung programs are not included, as these balances are less than $50 billion.

Social Insurance Programs Trust Fund Balances [1]

(In trillions of dollars)	2018	2017	2016	2015	2014
Social Security	2.9	2.8	2.8	2.8	2.8
Medicare	0.3	0.3	0.3	0.3	0.3

[1] As of the valuation date of the respective programs.

Social Security

The OASI Trust Fund, established on January 1, 1940, and the DI Trust Fund, established on August 1, 1956, collectively referred to as OASDI or "Social Security," provides cash benefits for eligible U.S. citizens and residents. Eligibility and benefit amounts are determined under the laws applicable for the period. Current law provides that the amount of the monthly benefit payments for workers and their eligible dependents or survivors is based on the workers' lifetime earnings histories.

The primary financing of the OASDI Trust Funds are taxes paid by workers, their employers, and individuals with self-employment income, based on work covered by the OASDI Program. Refer to the Unaudited RSI—Social Insurance section for additional information on Social Security program financing.

That portion of each trust fund not required to pay benefits and administrative costs is invested, on a daily basis, in interest-bearing obligations of the U.S. government. The *Social Security Act* authorizes the issuance by the Treasury of special nonmarketable, intragovernmental debt obligations for purchase exclusively by the trust funds. Although the special issues cannot be bought or sold in the open market, they are redeemable at any time at face value and thus bear no risk of fluctuation in principal value due to changes in market yield rates. Interest on the bonds is credited to the trust funds and becomes an asset to the funds and a liability to the General Fund. These Treasury securities and related interest are eliminated in consolidation at the governmentwide level.

Medicare

The Medicare Program, created in 1965, has two separate trust funds: the HI (Medicare Part A) and SMI (Medicare Parts B and D) Trust Funds. HI helps pay for inpatient hospital stays, home health care following a hospital stay, and skilled nursing facility and hospice care. SMI helps pay for hospital outpatient services, physician services, and assorted other services and products through Part B and for prescription drugs through Part D. Though the events that trigger benefit payments are similar, HI and SMI have different dedicated financing structures. Similar to OASDI, HI is financed primarily by payroll contributions. Other income to the HI Trust Fund includes a small amount of premium income from voluntary enrollees, receipts from fraud and abuse control activities, a portion of the federal income taxes that beneficiaries pay on Social Security benefits and interest credited on Treasury securities held in the HI Trust Fund. These Treasury securities and related interest are eliminated in the consolidation at the governmentwide level.

For SMI, transfers from the General Fund represent the largest source of income for both Parts B and D. Generally, beneficiaries finance the remainder of Parts B and D costs via monthly premiums to these programs. With the introduction of Part D drug coverage, Medicaid is no longer the primary payer of drug costs for full-benefit dually eligible beneficiaries of Medicare and Medicaid. For those beneficiaries, states are subject to a contribution requirement and must pay a portion of their estimated foregone drug costs into the Part D account (referred to as state transfers). The estimated foregone drug costs is the estimated difference between the drug costs that used to be fully covered by Medicaid for full-benefit dually eligible beneficiaries (i.e., for Medicare and Medicaid) prior to the introduction of Part D, and the drug cost that is now covered for such dually eligible beneficiaries by Medicare Part D. Fees related to brand-name prescription drugs, required by the ACA, are included as income for Part B of SMI. As with HI, interest received on Treasury securities held in the SMI Trust Fund is credited to the fund and these Treasury securities as well as related interest are eliminated in consolidation at the governmentwide level. By accounting convention, the transfers of general revenues are eliminated in the consolidation of the SOSI at the governmentwide level and as such, the general revenues that are used to finance Medicare Parts B and D are not included in these calculations. For the fiscal years 2018 and 2017 SOSI, the amounts eliminated totaled $33.0 trillion and $30.0 trillion, respectively. Refer to Unaudited RSI—Social Insurance section for additional information on Medicare program financing.

The financial projections for the Medicare program reflect substantial, but very uncertain, cost savings deriving from provisions of the ACA and the MACRA that lowered increases in Medicare payment rates to most categories of health care providers.

The ACA became law in fiscal year 2010 and provided funding for the establishment by the Centers for Medicare and Medicaid Services (CMS) of a Center for Medicare and Medicaid Innovation to test innovative payment and service delivery models to reduce program expenditures while preserving or enhancing the quality of care furnished to individuals. It also allowed for the establishment of a Center for Consumer Information and Insurance Oversight (CCIIO). One of the main programs under CCIIO is the Affordable Insurance Exchanges (the "Exchanges"). A brief description of these programs is presented below.

Health Insurance Exchanges. Grants have been provided to the states to establish Health Insurance Exchanges. The initial grants were made by HHS to the states "not later than one year after the date of enactment." Thus, HHS made the initial grants by March 23, 2011. Subsequent grants were issued by CMS through December 31, 2014, after which time no further grants could be made. All Exchanges were launched on October 1, 2013.

Risk Adjustment Program. The Risk Adjustment Program is a permanent program. It applies to non-grandfathered individuals and small group plans inside and outside the Exchanges. It provides payments to health insurance issuers that disproportionately attract higher-risk populations (such as individuals with chronic conditions) and transfers funds from plans with relatively lower risk enrollees to plans with relatively higher risk enrollees to protect against adverse selection. States that operate a state-based Exchange are eligible to establish a risk adjustment program. States operating a risk adjustment program may have an entity other than the Exchange perform this function. CMS operates a risk adjustment program for each state that does not operate its own.

It is important to note that the Medicare projections depend in part on the long-range feasibility of the various cost-saving measures in the ACA–most importantly, the reductions in the annual payment rate updates for most categories of Medicare providers by the growth in economy-wide private nonfarm business multifactor productivity and the specified physician updates put in place by MACRA. Without fundamental changes in the current delivery system, these productivity-related adjustments to Medicare payment rates would probably not be viable indefinitely. However, this outcome is achievable if health care providers are able to realize productivity improvements at a faster rate than experienced historically. On the other hand, if the health sector cannot transition to more efficient models of care delivery and achieve productivity increases commensurate with economy-wide productivity, and if the provider reimbursement rates paid by commercial insurers continue to be based on the same negotiated process used to date, then the availability and quality of health care received by Medicare beneficiaries would, under current law, fall over time compared to that received by those with private health insurance.

A transformation of health care in the U.S., affecting both the means of delivery and the method of paying for care, is also a possibility. Private health insurance and Medicare take important steps in this direction by initiating programs of research into innovative payment and service delivery models, such as accountable care organizations, patient-centered medical homes, improvement in care coordination for individuals with multiple chronic health conditions, better coordination of post-acute care, payment bundling, pay for performance, and assistance for individuals in making informed health choices. Such changes have the potential to reduce health care costs as well as cost growth rates and could, as a result, help lower health care spending to levels compatible with the lower price updates payable under current law.

The ability of new delivery and payment methods to lower cost growth rates is uncertain at this time. Preliminary indications are that some of these delivery reforms have had modest levels of success in lowering costs, but at this time it is too early to tell if these reductions in spending will continue, or if they will grow to the magnitude needed to align with the statutory Medicare price updates. For those providers affected by the productivity adjustments and the specified updates to physician payments, sustaining the price reductions will be challenging, as the best available evidence indicates that most providers cannot improve their productivity to this degree for a prolonged period given the labor-intensive nature of these services and that physician costs will grow at a faster rate than the specified updates. As a result, actual Medicare expenditures are highly uncertain for reasons apart from the inherent difficulty in projecting health care cost growth over time.

The specified rate updates could be an issue in years when levels of inflation are high and would be problematic when the cumulative gap between the price updates and physician costs becomes large. The gap will continue to widen throughout the projection, and it is estimated that physician payment rates under current law will be lower than they would have been under the SGR formula by 2048. Absent a change in the delivery system or level of update by subsequent legislation, access to Medicare-participating physicians may become a significant issue in the long term under current law. Overriding the price updates in current law, as lawmakers repeatedly did in the case of physician payment rates, would lead to substantially higher costs for Medicare in the long range than those projected in this report.

To help illustrate and quantify the potential magnitude of the cost understatement, the Trustees asked the Office of the Actuary at CMS to prepare an illustrative Medicare Trust Fund projection under a hypothetical alternative. This scenario illustrates the impact that would occur if the payment updates that are affected by the productivity adjustments transition from current law to the payment updates assumed for private health plans over the period 2028 to 2042. It also reflects physician payment updates that transition from current law to the increase in the Medicare Economic Index over the same period. Finally, the scenario assumes the continuation of the 5 percent bonuses for physicians in advanced alternative payment models (APMs) and of the $500-million payments for physicians in the merit-based incentive payment system, which are set to expire in 2025. This alternative was developed for illustrative purposes only; the calculations have not been audited; no endorsement of the policies underlying the illustrative alternative by the Trustees, CMS, or the Office of the Actuary should be inferred; and the examples do not attempt to portray likely or recommended future outcomes. Thus, the illustrations are useful only as general indicators of the substantial impacts that could result from future legislation affecting the productivity adjustments and physician updates under Medicare and of the broad range of uncertainty associated with such impacts. The table on the following page contains a comparison of the Medicare 75-year present values of estimated future income and estimated future expenditures under current law with those under the illustrative alternative scenario.

Medicare Present Values (in trillions) (Unaudited)

	2018 Consolidated SOSI Current Law	Illustrative Alternative Scenario [1, 2]
Income:		
Part A	$22.8	$22.9
Part B [3]	$9.4	$11.1
Part D [4]	$3.2	$3.2
Total income	$35.4	$37.2
Expenditures:		
Part A	$27.5	$32.6
Part B	$34.4	$40.9
Part D	$11.1	$11.1
Total expenditures	$73.0	$84.6
Income less expenditures:		
Part A	$4.7	$9.7
Part B	$25.0	$29.8
Part D	$7.9	$7.9
Excess of expenditures over income	$37.6	$47.4

[1] These amounts are not presented in the 2018 Trustees' Report.

[2] At the request of the Trustees, the Office of the Actuary at CMS has prepared an illustrative set of Medicare Trust Fund projections that differ from current law. No endorsement of the illustrative alternative to current law by the Trustees, CMS, or the Office of the Actuary should be inferred.

[3] Excludes $25.0 trillion and $29.8 trillion of General Revenue Contributions from the 2018 Consolidated SOSI Current Law projection and the Illustrative Alternative Scenario's projection, respectively; i.e., to reflect Part B income on a consolidated governmentwide basis.

[4] Excludes $7.9 trillion of General Revenue Contributions from both the 2018 Consolidated SOSI Current Law projection and the Illustrative Alternative projection; i.e., to reflect Part D income on a consolidated governmentwide basis.

Note: Totals may not equal the sum of components due to rounding.

The difference between the current-law and illustrative alternative projections is substantial for Parts A and B. All Part A fee-for-service providers and roughly half of Part B fee-for-service providers are affected by the productivity adjustments, so the current-law projections reflect an estimated 1.1 percent reduction in annual cost growth each year for these providers. If the payment updates that are affected by the productivity adjustments were to gradually transition from current law to the payment updates assumed for private health plans, the physician updates transitioned to the Medicare Economic Index, and the 5 percent bonuses paid to physicians in advanced APMs did not expire, as illustrated under the alternative scenario, the estimated present values of Part A and Part B expenditures would each be higher than the current-law projections by roughly 18 and 19 percent, respectively. As indicated above, the present value of Part A income is basically unaffected under the alternative scenario.

The Part D values are the same under each projection because the services are not affected by the productivity adjustments or the physician updates. The extent to which actual future Part A and Part B costs exceed the projected amounts due to changes to the productivity adjustments and physician updates depends on what specific changes might be legislated and whether Congress would pass further provisions to help offset such costs. As noted, these examples reflect only hypothetical changes to provider payment rates.

Social Security and Medicare–Demographic and Economic Assumptions

The Boards of Trustees[8] of the OASDI and Medicare Trust Funds provide in their annual reports to Congress short-range (10-year) and long-range (75-year) actuarial estimates of each trust fund. Significant uncertainty surrounds the estimates, especially for a period as long as 75 years. To illustrate the range of uncertainty, the Trustees use three alternative scenarios (low-cost, intermediate, and high-cost) that use specific assumptions. These assumptions include fertility rates, rates of change in mortality, LPR and other-than-LPR immigration levels, emigration levels, changes in real GDP, changes in the CPI, changes in average real wages, unemployment rates, trust fund real yield rates, and disability incidence and recovery rates. The assumptions used for the most recent set of projections shown in Table 1A (Social Security) and Table 1B (Medicare) are generally referred to as the "intermediate assumptions," and reflect the trustees' reasonable estimate of expected future experience. For further information on Social Security and Medicare demographic and economic assumptions, refer to SSA's and HHS's Agency Financial Reports.

[8] The boards are composed of six members. Four members serve by virtue of their positions in the federal government: the Secretary of the Treasury, who is the Managing Trustee; the Secretary of Labor; the Secretary of Health and Human Services; and the Commissioner of Social Security. The President appoints and the Senate confirms the other two members to serve as public representatives. These two positions are currently vacant.

Table 1A
Social Security – Demographic and Economic Assumptions

Demographic Assumptions

Year	Total Fertility Rate[1]	Age-Sex Adjusted Death Rate (per 100,000)[2]	Net Annual Immigration (persons per year)[3]	Period Life Expectancy at Birth[4] Male	Female
2018	1.81	776.4	1,678,000	76.9	81.5
2020	1.84	762.4	1,498,000	77.2	81.7
2030	2.00	697.7	1,321,000	78.4	82.7
2040	2.00	641.1	1,272,000	79.5	83.6
2050	2.00	591.5	1,247,000	80.5	84.5
2060	2.00	547.9	1,233,000	81.5	85.3
2070	2.00	509.4	1,225,000	82.4	86.0
2080	2.00	475.2	1,221,000	83.2	86.7
2090	2.00	444.7	1,218,000	84.0	87.3

Economic Assumptions

Year	Real Wage Differential (percent change)[5]	Average Annual Wage In Covered Employment (percent change)[6]	CPI (percent change)[7]	Real GDP (percent change)[8]	Total Employment (percent change)[9]	Average Annual Interest Rate (percent)[10]
2018	1.59	3.82	2.23	2.7	1.1	2.7
2020	1.95	4.55	2.60	2.6	0.8	3.9
2030	1.28	3.88	2.60	2.1	0.5	5.3
2040	1.22	3.82	2.60	2.1	0.5	5.3
2050	1.23	3.83	2.60	2.1	0.5	5.3
2060	1.22	3.82	2.60	2.1	0.4	5.3
2070	1.15	3.75	2.60	2.1	0.4	5.3
2080	1.13	3.73	2.60	2.1	0.5	5.3
2090	1.15	3.75	2.60	2.1	0.4	5.3

[1]The total fertility rate for any year is the average number of children that would be born to a woman in her lifetime if she were to experience, at each age of her life, the birth rate observed in, or assumed for, the selected year, and if she were to survive the entire childbearing period.

[2]The age-sex-adjusted death rate is based on the enumerated total population as of April 1, 2010, if that population were to experience the death rates by age and sex observed in, or assumed for, the selected year. It is a summary measure and not a basic assumption; it summarizes the basic assumptions from which it is derived.

[3]Net annual immigration is the number of persons who enter during the year (both as lawful permanent residents and otherwise) minus the number of persons who leave during the year. It is a summary measure and not a basic assumption; it summarizes the effects of the basic assumptions from which it is derived.

[4]The period life expectancy at birth for a given year is the average number of years expected prior to death for a person born on January 1 in that year, using the mortality rates for that year over the course of his or her remaining life. It is a summary measure and not a basic assumption; it summarizes the effects of the basic assumptions from which it is derived.

[5]The real-wage differential is the annual percentage change in the average annual wage in covered employment less the annual percentage change in the CPI for Urban Wage Earners and Clerical Workers (CPI-W). Values are rounded after all computations.

[6]The average annual wage in covered employment is the total amount of wages and salaries for all employment covered by the OASDI program in a year, divided by the number of employees with any such earnings during the year. It is a summary measure and not a basic assumption; it summarizes the basic assumptions from which it is derived.

[7]The CPI is the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W).

[8]The real GDP is the value of total output of goods and services in 2009 dollars. It is a summary measure and not a basic assumption; it summarizes the effects of the basic assumptions from which it is derived.

[9]Total employment is total U.S. military and civilian employment. It is a summary measure and not a basic assumption; it summarizes the basic assumptions from which it is derived.

[10]The average annual interest rate is the average of the nominal interest rates, which compound semiannually, for special public-debt obligations issuable to the OASI and DI Trust Funds in each of the 12 months of the year. It is a summary measure and not a basic assumption; it summarizes the basic assumptions from which it is derived.

Table 1B
Medicare – Demographic and Economic Assumptions

Demographic Assumptions

Year	Total Fertility Rate[1]	Age-Sex Adjusted Death Rate (per 100,000)[2]	Net Annual Immigration (persons per year)[3]
2018	1.81	776.4	1,678,000
2020	1.84	762.4	1,498,000
2030	2.00	697.7	1,321,000
2040	2.00	641.1	1,272,000
2050	2.00	591.5	1,247,000
2060	2.00	547.9	1,233,000
2070	2.00	509.4	1,225,000
2080	2.00	475.2	1,221,000
2090	2.00	444.7	1,218,000

Economic Assumptions

					Per Beneficiary Cost[8] (percent change)			
						SMI		
Year	Real Wage Differential (percent change)[4]	Average Annual Wage In Covered Employment (percent change)[5]	CPI (percent change)[6]	Real GDP (percent change)[7]	HI	Part B	Part D	Real Interest Rate (percent)[9]
2018	1.59	3.82	2.23	2.7	1.4	5.3	0.5	0.1
2020	1.95	4.55	2.60	2.6	3.3	4.7	6.0	0.8
2030	1.28	3.88	2.60	2.1	4.4	5.3	5.3	2.7
2040	1.22	3.82	2.60	2.1	4.6	4.2	4.7	2.7
2050	1.23	3.83	2.60	2.1	3.8	3.8	4.7	2.7
2060	1.22	3.82	2.60	2.1	3.6	3.7	4.5	2.7
2070	1.15	3.75	2.60	2.1	3.8	3.6	4.4	2.7
2080	1.13	3.73	2.60	2.1	3.9	3.7	4.4	2.7
2090	1.15	3.75	2.60	2.1	3.4	3.5	4.3	2.7

[1]Average number of children per woman.

[2]The age-sex-adjusted death rate per 100,000 that would occur in the enumerated population as of April 1, 2010, if that population were to experience the death rates by age and sex observed in, or assumed for, the selected year.

[3]Includes legal immigration, net of emigration, as well as other, non-legal, immigration.

[4]Difference between percentage increases in wages and the CPI.

[5]Average annual wage in covered employment.

[6]Consumer price index represents a measure of the average change in prices over time in a fixed group of goods and services.

[7]Total dollar value of all goods and services produced in the United States, adjusted to remove the impact of assumed inflation growth.

[8]These increases reflect the overall impact of more detailed assumptions that are made for each of the different types of service provided by the Medicare program (for example, hospital care, physician services, and pharmaceutical costs). These assumptions include changes in the payment rates, utilization, and intensity of each type of service.

[9]Average rate of interest earned on new trust fund securities, above and beyond rate of inflation.

Railroad Retirement

The Railroad Retirement and Survivor Benefit program pays full retirement annuities at age 60 to railroad workers with 30 years of service. The program pays disability annuities based on total or occupational disability. It also pays annuities to spouses and divorced spouses of retired workers and to widow(er)s, surviving divorced spouses, remarried widow(er)s, children, and parents of deceased railroad workers. Medicare covers qualified railroad retirement beneficiaries in the same way as it does Social Security beneficiaries.

The RRB and the SSA share jurisdiction over the payment of retirement and survivor benefits. The RRB has jurisdiction over the payment of retirement benefits if the employee has at least 10 years of railroad service, or five years if performed after 1995. For survivor benefits, RRB requires that the employee's last regular employment before retirement or death be in the railroad industry. If a railroad employee or his or her survivors do not qualify for railroad retirement benefits, the RRB transfers the employee's railroad retirement credits to SSA, where they are treated as social security credits.

Payroll taxes paid by railroad employers and their employees are a primary source of funding for the Railroad Retirement and Survivor Benefit Program. By law, railroad retirement taxes are coordinated with Social Security taxes. Employees and employers pay Tier I taxes at the same rate as Social Security taxes and Tier II taxes to finance railroad retirement benefit payments that are higher than Social Security levels.

Revenues in excess of benefit payments are invested to provide additional trust fund income. Legislation enacted in 2001 allowed for Railroad Retirement Account funds transferred to the NRRIT to be invested in non-governmental assets, as well as in governmental securities. Funds transferred from the Social Security Equivalent Benefit (SSEB) Account to the NRRIT are allowed to be invested only in governmental securities. Under the financial interchange provisions, the Railroad Retirement program's SSEB Account and the trust funds interchange amounts on an annual basis so that each trust fund is in the same position it would have been had railroad retirement always been covered under Social Security.

Since its inception, NRRIT has received $21.3 billion from RRB (including $19.2 billion in fiscal year 2003, pursuant to the *Railroad Retirement and Survivors' Improvement Act of 2001*) and returned $22.9 billion. During fiscal year 2018, the NRRIT made net transfers of $1.8 billion to the RRB to pay retirement benefits. Administrative expenses of the trust are paid out of trust assets. The balance as of September 30, 2018, and 2017, of non-federal securities and investments of the NRRIT are disclosed in Note 7—Debt and Equity Securities.

Another major source of income to the Railroad Retirement and Survivor Benefit program consists of financial transactions with the Social Security and Medicare Trust Funds. The RRB, SSA, and CMS are parties to a financing arrangement, the "financial interchange", which is intended to put the OASDI and Medicare HI Trust Funds in the same positions they would have been had railroad employment been covered under the *Social Security* and *FICAs*.

Other sources of program income include revenue resulting from federal income taxes on railroad retirement benefits, and appropriations provided after 1974 as part of a phase out of certain vested dual benefits. From a governmentwide perspective, these future financial interchanges and transactions are intragovernmental transfers and are eliminated in consolidation.

The estimated future revenues and expenditures reflected in the SOSI are based on various economic, employment, and other actuarial assumptions, and assume that the Railroad Retirement program will continue as presently constructed. The calculations assume that all future transfers required by current law under the financial interchange will be made. For further details on actuarial assumptions related to the Railroad Retirement program and how these assumptions affect amounts presented on the SOSI and SCSIA, consult the Technical Supplement to the *27th Actuarial Valuation of the Assets and Liabilities Under the Railroad Retirement Acts as of December 31, 2016* and RRB's financial statements.

Black Lung–Disability Benefit Program

The Black Lung Disability Benefit Program provides for compensation, medical, and survivor benefits for eligible coal miners who are totally disabled due to pneumoconiosis (black lung disease) arising out of their coal mine employment, and the BLDTF provides benefit payments when no responsible mine operator (RMO) can be assigned the liability or when the liability is adjudicated to the BLDTF, which may occur as a result of, among other things, bankruptcy of the RMO. DOL operates the Black Lung Disability Benefit Program.

Black lung disability benefit payments are funded by excise taxes from coal mine operators based on the domestic sale of coal, as are the fund's administrative costs. These taxes are collected by the Internal Revenue Service (IRS) and transferred to the BLDTF, which was established under the authority of the *Black Lung Benefits Revenue Act*, and administered by the Treasury.

P.L. 110-343, *Division B-Energy Improvement and Extension Act of 2008*, enacted on October 3, 2008, among other things, restructured the BLDTF debt by refinancing the outstanding high interest rate repayable advances with low interest rate discounted debt instruments similar in form to zero-coupon bonds, plus a one-time appropriation. This Act also allowed that any subsequent debt issued by the BLDTF may be used to make benefit payments, other authorized expenditures, or to repay debt and interest from the initial refinancing.

The significant assumptions used in the projections for the SOSI are the coal excise tax revenue estimates, the tax rate structure, number of beneficiaries, life expectancy, federal civilian pay raises, medical cost inflation, and interest rates used to discount future cash flows. These assumptions affect the amounts reported on the SOSI and the SCSIA. The program's valuation date is September 30 for each year of information presented in the SOSI and the SCSIA. Refer to DOL's financial statements for further details on significant assumptions related to the Black Lung Disability Benefit Program, and how these assumptions affect amounts presented on the SOSI and SCSIA.

Statement of Changes in Social Insurance Amounts

The SCSIA reconciles the change (between the current valuation and the prior valuation) in the present value of estimated future revenue less estimated future expenditures for current and future participants (the open group measure) over the next 75 years (except Black Lung which has a rolling 25-year projection period through September 30, 2043). The reconciliation identifies several components of the changes that are significant and provides reasons for the changes. The following disclosures relate to the SCSIA including the reasons for the components of the changes in the open group measure during the reporting period from the end of the previous reporting period for the government's social insurance programs.

Social Security

The SCSIA shows two reconciliations for Social Security: (1) changes from the period beginning on January 1, 2017, to the period beginning on January 1, 2018, and (2) changes from the period beginning on January 1, 2016, to the period beginning on January 1, 2017. All estimates relating to the Social Security Program in the SCSIA represent values that are incremental to the prior change. As an example, the present values shown for economic data, assumptions, and methods represent the additional effect of these new data, assumptions, and methods after considering the effects from demography and the change in the valuation period. In general, an increase in the present value of net cash flows represents a positive change (improving financing), while a decrease in the present value of net cash flows represents a negative change (worsening financing).

Assumptions Used for the Components of the Changes for the Social Security Program

The present values included in the SCSIA are for the current and prior years and are based on various economic as well as demographic assumptions used for the intermediate assumptions in the Social Security Trustees Reports for these years. Table 1A summarizes these assumptions for the current year.

From the period beginning on January 1, 2017 to the period beginning on January 1, 2018

Present values as of January 1, 2017 are calculated using interest rates from the intermediate assumptions of the 2017 Social Security Trustees Report. All other present values in this part of the SCSIA are calculated as a present value as of January 1, 2018. Estimates of the present value of changes in social insurance amounts due to changing the valuation period and changing demographic data, assumptions, and methods are presented using the interest rates under the intermediate assumptions of the 2017 Social Security Trustees Report. Because interest rates are an economic estimate and all estimates in the table are incremental to the prior change, all other present values in this part of the SCSIA are calculated using the interest rates under the intermediate assumptions of the 2018 Social Security Trustees Report.

From the period beginning on January 1, 2016 to the period beginning on January 1, 2017

Present values as of January 1, 2016 are calculated using interest rates from the intermediate assumptions of the 2016 Social Security Trustees Report. All other present values in this part of the SCSIA are calculated as a present value as of January 1, 2017. Estimates of the present value of changes in social insurance amounts due to changing the valuation period and changing demographic data, assumptions, and methods are presented using the interest rates under the intermediate assumptions of the 2016 Social Security Trustees Report. Because interest rates are an economic estimate and all estimates in the table are incremental to the prior change, all other present values in this part of the SCSIA are calculated using the interest rates under the intermediate assumptions of the 2017 Social Security Trustees Report.

Changes in Valuation Period

From the period beginning on January 1, 2017 to the period beginning on January 1, 2018

The effect on the 75-year present values of changing the valuation period from the prior valuation period (2017-2091) to the current valuation period (2018-2092) is measured by using the assumptions for the prior valuation and extending them to cover the current valuation. Changing the valuation period removes a small negative net cash flow for 2017, replaces it with a much larger negative net cash flow for 2092, and measures the present values as of January 1, 2018, one year later. Thus, the present value of estimated future net cash flows (excluding the combined OASI and DI Trust Fund asset reserves at the start of the period) decreased (became more negative) when the 75-year valuation period changed from 2017-2091 to 2018-2092. In addition, the effect on the level of asset reserves in the combined OASI and DI Trust Funds of changing the valuation period is measured by assuming all values projected in the prior valuation for the year 2017 are realized. The change in valuation period increased the starting level of asset reserves in the combined OASI and DI Trust Funds. As a result, the present value of the estimated future net cash flows decreased by $0.6 trillion.

From the period beginning on January 1, 2016 to the period beginning on January 1, 2017

The effect on the 75-year present values of changing the valuation period from the prior valuation period (2016-2090) to the current valuation period (2017-2091) is measured by using the assumptions for the prior valuation and extending them to cover the current valuation. Changing the valuation period removes a small negative net cash flow for 2016, replaces it with a much larger negative net cash flow for 2091, and measures the present values as of January 1, 2017, one year later. Thus, the present value of estimated future net cash flows (excluding the combined OASI and DI Trust Fund asset reserves at the start of the period) decreased (became more negative) when the 75-year valuation period changed from 2016-2090 to 2017-2091. In addition, the effect on the level of asset reserves in the combined OASI and DI Trust Funds of changing the valuation period is measured by assuming all values projected in the prior valuation for the year 2016 are realized. The change in valuation period increased the starting level of asset reserves in the combined OASI and DI Trust Funds. As a result, the present value of the estimated net cash flows decreased by $0.6 trillion.

Changes in Demographic Data, Assumptions, and Methods

From the period beginning on January 1, 2017 to the period beginning on January 1, 2018

The ultimate demographic assumptions for the current valuation (beginning on January 1, 2018), with the exception of a small decrease of 10,000 LPR immigrants per annum in the future, are the same as those for the prior valuation. However, the starting demographic values and the way these values transition to the ultimate assumptions were changed.

- Final birth rate data for 2016 indicated slightly lower birth rates than were assumed in the prior valuation.
- Recent fertility data suggests that the short-term increase in the total fertility rate used in the prior valuation to account for an assumed deferral in childbearing (resulting from the recent economic downturn) was no longer warranted. The observed persistent drop in the total fertility rate in recent years is now assumed to be a loss of potential births rather than just a deferral for this period.
- Incorporating 2015 mortality data obtained from the National Center for Health Statistics (NCHS) for ages under 65 and preliminary 2015 mortality data from Medicare experience for ages 65 and older resulted in higher death rates for all future years than were projected in the prior valuation.
- More recent LPR and other-than-LPR immigration data and historical population data were included.

Inclusion of the recent birth rate data, eliminating the short-term increase in fertility, and immigration data decreased the present value of estimated future net cash flows, while the inclusion of the recent mortality data and historical population data increased the present value of estimated future net cash flows.

There was one notable change in demographic methodology:

- Improved the method for projecting mortality rates by marital status by utilizing recent data from NCHS and the American Community Survey.

Inclusion of this new method increased the present value of estimated future net cash flows. Overall, changes to these assumptions caused the present value of the estimated future net cash flows to increase by $0.1 trillion.

From the period beginning on January 1, 2016 to the period beginning on January 1, 2017

The ultimate demographic assumptions for the current valuation (beginning on January 1, 2017) are the same as those for the prior valuation. However, the starting demographic values and the way these values transition to the ultimate assumptions were changed.

- Final birth rate data for 2015 indicated slightly lower birth rates than were assumed in the prior valuation.

- Incorporating 2014 mortality data obtained from NCHS at ages under 65 and preliminary 2014 mortality data from Medicare experience at ages 65 and older resulted in higher death rates for all future years than were projected in the prior valuation.
- More recent legal and other-than-legal immigration data and historical population data were included.

Inclusion of the recent birth rate data and immigration data decreased the present value of estimated future net cash flows, while the inclusion of the recent mortality data increased the present value of estimated future net cash flows.

There were no notable changes in demographic methodology. Overall, changes to these assumptions caused the present value of the estimated net cash flows to decrease by $0.1 trillion.

Changes in Economic Data, Assumptions, and Methods

From the period beginning on January 1, 2017 to the period beginning on January 1, 2018

The ultimate economic assumptions for the current valuation (beginning on January 1, 2018), are the same as those for the prior valuation. However, the starting economic values and the way these values transition to the ultimate assumptions were changed.

- The estimated level of potential GDP was reduced by about 1 percent in 2017 and throughout the projection period, primarily due to the slow growth in labor productivity for 2010 through 2017 and low unemployment rates in 2017. This lower estimated level of potential GDP means that cumulative growth in actual GDP is 1 percent less over the remainder of the projected recovery than was assumed in the prior valuation.
- Near-term interest rates were decreased, reflecting a more gradual path for the rise to the ultimate real interest rate than was assumed in the prior valuation.
- New data from the Bureau of Economic Analysis (BEA) indicated lower-than-expected ratios of labor compensation to GDP for 2016 and 2017, while new data from the IRS indicated lower-than-expected ratios of taxable payroll to GDP for 2016 and 2017. This new data led to assumed extended recoveries in these ratios to the unchanged ultimate ratios.

The changes in near-term interest rates and GDP decreased the present value of estimated future net cash flows. The new data from BEA and IRS and the resulting extended recovery in the ratios of labor compensation to GDP and taxable payroll to GDP increased the present value of estimated future net cash flows.

There was one notable change in economic methodology:

- Improved the method for projecting educational attainment among women in age groups 45-49 and 50-54 in the labor force participation model.

Inclusion of this new method increased the present value of estimated future net cash flows. Overall, changes to these assumptions caused the present value of the estimated future net cash flows to decrease by $0.5 trillion.

From the period beginning on January 1, 2016 to the period beginning on January 1, 2017

For the current valuation (beginning on January 1, 2017), there was one change to the ultimate economic assumptions.

- The ultimate average real-wage differential is assumed to be 1.20 percent in the current valuation, which is close to a 0.01 percent decrease relative to the previous valuation (even though both ultimate average real-wage differentials are 1.20 when rounded to two decimal places).

In addition to this change in ultimate assumption, the assumed path of the real-wage differential in the first 10 years of the projection period was also lower than in the previous valuation. This led to 0.05 percent lower annual growth in the average annual wage in covered employment in the first 10 years. The lower long-term and near-term real-wage differential assumptions are based on new projections by the CMS of faster growth in employer sponsored group health insurance premiums. Because these premiums are not subject to the payroll tax, faster growth in these premiums means that a smaller share of employee compensation will be in the form of wages that are subject to the payroll tax. The lower real-wage differential decreased the present value of estimated future net cash flows.

Otherwise, the ultimate economic assumptions for the current valuation are the same as those for the prior valuation. However, the starting economic values and the way these values transition to the ultimate assumptions were changed. The most notable change was updating the near-term interest rates. Also notable was an assumed weaker recovery from the recent recession than previously expected, which led to a reduction in the ultimate level of actual and potential GDP of about 1.0 percent for all years after the short-range period. The changes in near-term interest rates and GDP decreased the present value of estimated future net cash flows. Other, smaller changes in starting values and near-term growth assumptions combined to decrease the present value of estimated future net cash flows. Overall, changes to these assumptions caused the present value of the estimated future net cash flows to decrease by $0.6 trillion.

Changes in Law or Policy

From the period beginning on January 1, 2017 to the period beginning on January 1, 2018

The monetary effect of the changes in law or policy on the present value of estimated future net cash flows of the OASDI program was not significant at the consolidated level. Please refer to SSA's financial statements for further information related to the impact of the changes in law or policy on the present value of estimated future net cash flows of the OASDI program.

From the period beginning on January 1, 2016 to the period beginning on January 1, 2017

The monetary effect of the changes in law or policy on the present value of estimated future net cash flows of the OASDI program was not significant at the consolidated level. Please refer to SSA's financial statements for further information related to the impact of the changes in law or policy on the present value of estimated future net cash flows of the OASDI program.

Changes in Methodology and Programmatic Data

From the period beginning on January 1, 2017 to the period beginning on January 1, 2018

Several methodological improvements and updates of program-specific data are included in the current valuation (beginning on January 1, 2018). The most significant are identified below.

- The prior valuation assumed 99.0 percent of fully insured women (excluding those who are receiving a disability or widow benefit) were in receipt of a retired-worker benefit at age 70. The current valuation increases this percentage to 99.5 which is equivalent to the assumption for men.
- For the current valuation, a 10 percent sample of newly-entitled worker beneficiaries in 2015 was used to project average benefit levels of retired-worker and disabled-worker beneficiaries. This sample was updated from the 2013 sample used for the prior valuation. In addition, the method used to estimate earnings histories for retired-worker beneficiaries becoming newly entitled in each year after 2017 has been expanded to better match targeted average taxable earnings levels for each of nine birth cohorts (those becoming entitled at ages 62 through 70 in a year).
- Recent data and estimates provided by the Office of Tax Analysis (OTA) at the Treasury were incorporated, which indicate higher ultimate levels of revenue from taxation of OASDI benefits than assumed in the prior valuation. These higher levels are primarily due to changes OTA made in their modeling, resulting in a larger share of benefits being subject to income tax.
- The current valuation incorporates both a better data source for determining the total number of months of retroactive benefits for newly awarded disabled-worker beneficiaries and a new adjustment factor which better aligns projected months of disabled-worker retroactive benefit entitlement with observed historical experience.

Increasing the percentage of fully insured women who are in receipt of a retired-worker benefit at age 70 decreased the present value of estimated cash flows. Updating the sample year for average benefit level calculations, increasing the ultimate taxation of benefits ratios, and the changes to estimates of retroactive benefit payments increased the present value of estimated future net cash flows. Overall, changes to these assumptions caused the present value of the estimated future net cash flows to increase by $0.2 trillion.

From the period beginning on January 1, 2016 to the period beginning on January 1, 2017

The monetary effect of the changes in methodology and programmatic data on the present value of estimated future net cash flows was not significant at the consolidated level. Please refer to SSA's financial statements for further information related to the impact of changes in methodology and programmatic data on the present value of estimated future net cash flows of the OASDI program.

Medicare

The SCSIA shows two reconciliations for Medicare: (1) changes from the period beginning on January 1, 2017, to the period beginning on January 1, 2018, and (2) changes from the period beginning on January 1, 2016, to the period beginning on January 1, 2017. All estimates relating to the Medicare program in the SCSIA represent values that are incremental to the prior change. As an example, the present values shown for demographic data, assumptions, and methods represent the additional effect that these assumptions have, once the effects from the change in the valuation period and projection base have been considered. In general, an increase in the present value of net cash flows represents a positive change (improving financing), while a decrease in the present value of net cash flows represents a negative change (worsening financing).

Assumptions Used for the Components of the Changes for the Medicare Program

The present values included in the SCSIA are for the current and prior years and are based on various economic and demographic assumptions used for the intermediate assumptions in the Medicare Trustees Reports for these years. Table 1B summarizes these assumptions for the current year**.**

From the period beginning on January 1, 2017 to the period beginning on January 1, 2018

Present values as of January 1, 2017 are calculated using interest rates from the intermediate assumptions of the 2017 Medicare Trustees Report. All other present values in this part of the SCSIA are calculated as a present value as of January 1, 2018. Estimates of the present value of changes in social insurance amounts due to changing the valuation period, projection base, demographic assumptions, and law are presented using the interest rates under the intermediate assumptions of the 2017 Medicare Trustees Report. Since interest rates are an economic estimate and all estimates in the table are incremental to the prior change, the estimates of the present values of changes in economic and health care assumptions are calculated using the interest rates under the intermediate assumptions of the 2018 Medicare Trustees Report.

From the period beginning on January 1, 2016 to the period beginning on January 1, 2017

Present values as of January 1, 2016 are calculated using interest rates from the intermediate assumptions of the 2016 Medicare Trustees Report. All other present values in this part of the SCSIA are calculated as a present value as of January 1, 2017. Estimates of the present value of changes in social insurance amounts due to changing the valuation period, projection base, demographic assumptions, and law are presented using the interest rates under the intermediate assumptions of the 2016 Medicare Trustees Report. Since interest rates are an economic estimate and all estimates in the table are incremental to the prior change, the estimates of the present values of changes in economic and health care assumptions are calculated using the interest rates under the intermediate assumptions of the 2017 Medicare Trustees Report.

Changes in Valuation Period

From the period beginning on January 1, 2017 to the period beginning on January 1, 2018

The effect on the 75-year present values of changing the valuation period from the prior valuation period (2017-2091) to the current valuation period (2018-2092) is measured by using the assumptions for the prior valuation period and extending them, in the absence of any other changes, to cover the current valuation period. Changing the valuation period removes a small negative net cash flow for 2017, replaces it with a much larger negative net cash flow for 2092, and measures the present values as of January 1, 2018, one year later. Thus, the present value of estimated future net cash flow (including or excluding the combined Medicare Trust Fund assets at the start of the period) decreased (became more negative) when the 75-year valuation period changed from 2017-2091 to 2018-2092. In addition, the effect on the level of assets in the combined Medicare Trust Funds of changing the valuation period is measured by assuming all values projected in the prior valuation for the year 2017 are realized. The change in valuation period resulted in a very slight increase in the starting level of assets in the combined Medicare Trust Funds. As a result, the present value of the estimated future net cash flows decreased by $1.3 trillion.

From the period beginning on January 1, 2016 to the period beginning on January 1, 2017

The effect on the 75-year present values of changing the valuation period from the prior valuation period (2016-2090) to the current valuation period (2017-2091) is measured by using the assumptions for the prior valuation period and extending them, in the absence of any other changes, to cover the current valuation period. Changing the valuation period removes a small negative net cash flow for 2016, replaces it with a much larger negative net cash flow for 2091, and measures the present values as of January 1, 2017, one year later. Thus, the present value of estimated future net cash flow (including or excluding the combined Medicare Trust Fund assets at the start of the period) decreased (became more negative) when the 75-year valuation period changed from 2016-2090 to 2017-2091. In addition, the effect on the level of assets in the combined Medicare Trust Funds of changing the valuation period is measured by assuming all values projected in the prior valuation for the year 2016 are realized. The change in valuation period increased the starting level of assets in the combined Medicare Trust Funds. As a result, the present value of the estimated net cash flows decreased by $1.4 trillion.

Changes in the Demographic Data, Assumptions, and Methods

From the period beginning on January 1, 2017 to the period beginning on January 1, 2018

The demographic assumptions used in the Medicare projections are the same as those used for OASDI and are prepared by the Office of the Chief Actuary at SSA.

The ultimate demographic assumptions for the current valuation (beginning on January 1, 2018), with the exception of a small decrease of 10,000 LPR immigrants per annum in the future, are the same as those for the prior valuation. However, the starting demographic values and the way these values transition to the ultimate assumptions were changed.

- Final birth rate data for 2016 indicated slightly lower birth rates than were assumed in the prior valuation.
- Recent fertility data suggests that the short-term increase in the total fertility rate used in the prior valuation to account for an assumed deferral in childbearing (resulting from the recent economic downturn) was no longer warranted. The observed persistent drop in the total fertility rate in recent years is now assumed to be a loss of potential births rather than just a deferral for this period.
- Incorporating 2015 mortality data obtained from the NCHS at ages under 65 and preliminary 2015 mortality data from Medicare experience at ages 65 and older resulted in higher death rates for all future years than were projected in the prior valuation.
- More recent LPR and other-than-LPR immigration data and historical population data were included.

There was one notable change in demographic methodology:

- Improved the method for projecting mortality rates by marital status by utilizing recent data from NCHS and the American Community Survey.

These changes lowered overall Medicare enrollment for the current valuation period and resulted in an increase in the estimated future net cash flow. The present value of estimated income and expenditures are both lower for Part A and Part B but higher for Part D. Overall, changes to these assumptions caused the present value of the estimated future net cash flows to increase by $0.6 trillion.

From the period beginning on January 1, 2016 to the period beginning on January 1, 2017

The demographic assumptions used in the Medicare projections are the same as those used for the OASDI and are prepared by the Office of the Chief Actuary at SSA.

The ultimate demographic assumptions for the current valuation (beginning on January 1, 2017 are the same as those for the prior valuation. However, the starting demographic values and the way these values transition to the ultimate assumptions were changed.

- Final birth rate data for 2015 indicated slightly lower birth rates than were assumed in the prior valuation.
- Incorporating 2014 mortality data obtained from the NCHS at ages under 65 and preliminary 2014 mortality data from Medicare experience at ages 65 and older resulted in higher death rates for all future years than were projected in the prior valuation.
- More recent legal and other-than-legal immigration data and historical population data were included.

There were no consequential changes in demographic methodology.

These changes slightly lowered overall Medicare enrollment for the current valuation period and resulted in a decrease in the estimated future net cash flow. The present value of estimated expenditures is lower for Part A but slightly higher for Parts B and D; and the present value of estimated income is also higher for Parts B and D but lower for Part A. Overall, changes to these assumptions caused the present value of the estimated future net cash flows to decrease by $0.1 trillion.

Changes in Economic and Other Health Care Assumptions

From the period beginning on January 1, 2017 to the period beginning on January 1, 2018

The economic assumptions used in the Medicare projections are the same as those used for the OASDI and are prepared by the Office of the Chief Actuary at SSA.

The ultimate economic assumptions for the current valuation (beginning on January 1, 2018) are the same as those for the prior valuation. However, the starting economic values and the way these values transition to the ultimate assumptions were changed.

- The estimated level of potential GDP was reduced by about 1 percent in 2017 and throughout the projection period, primarily due to the slow growth in labor productivity for 2010 through 2017 and low unemployment rates in 2017. This lower estimated level of potential GDP means that cumulative growth in actual GDP is 1 percent less over the remainder of the projected recovery than was assumed in the prior valuation.
- Near-term interest rates were decreased, reflecting a more gradual path for the rise to the ultimate real interest rate than was assumed in the prior valuation.
- New data from the BEA indicated lower-than-expected ratios of labor compensation to GDP for 2016 and 2017, while new data from the IRS indicated lower-than-expected ratios of taxable payroll to GDP for 2016 and 2017.
- This new data led to assumed extended recoveries in these ratios to the unchanged ultimate ratios.

There was one notable change in economic methodology:

- Improved the method for projecting educational attainment among women in age groups 45-49 and 50-54 in the labor force participation model.

The health care assumptions are specific to the Medicare projections. The following health care assumptions were changed in the current valuation.

- Utilization rate assumptions for inpatient hospital services were decreased.
- Utilization rate and case mix for skilled nursing facilities services were decreased. Payment rates to private health plans are higher than projected in last year's report primarily due to higher risk scores and increased coding by plans.
- Higher projected drug manufacturer rebates.

The net impact of these changes resulted in a decrease in the estimated future net cash flow for total Medicare. For Part A, these changes resulted in an overall decrease in the estimated future net cash flow. For Part B, these changes increased the present value of estimated future expenditures (and also income). For Part D, these changes decreased the present value of estimated expenditures (and also income). Overall, the net impact of these changes caused the present value of estimated future net cash flows to decrease by $1.5 trillion.

From the period beginning on January 1, 2016 to the period beginning on January 1, 2017

The economic assumptions used in the Medicare projections are the same as those used for the OASDI and are prepared by the Office of the Chief Actuary at SSA.

For the current valuation (beginning on January 1, 2017), there was one change to the ultimate economic assumptions.

- The ultimate average real-wage differential is assumed to be 1.20 percent in the current valuation period, which is close to a 0.01 percent decrease relative to the previous valuation (even though both ultimate average real-wage differentials are 1.20 when rounded to two decimal places).

In addition to this change in assumption, the assumed real-wage differential for the first ten years of the projection period averaged 0.05 percent lower than in the previous valuation. The lower long-term and near-term real-wage differential assumptions are based on new projections of faster growth in employer sponsored group health insurance premiums. Because these premiums are not subject to the payroll tax, faster growth in these premiums means that a smaller share of employee compensation will be in the form of wages that are subject to the payroll tax.

Otherwise, the ultimate economic assumptions for the current valuation are the same as those for the prior valuation. However, the starting economic values and the way these values transition to the ultimate assumptions were changed. Most significantly, an assumed weaker recovery from the recent recession than previously expected led to a reduction in the ultimate level of actual and potential GDP of about 1.0 percent for all years after the short-range period.

The health care assumptions are specific to the Medicare projections. The following health care assumptions were changed in the current valuation.

- Utilization rate assumptions for inpatient hospital and skilled nursing facilities services were decreased.
- The number of beneficiaries enrolled in Medicare Advantage plans and their relative costs are slightly different from last year's assumptions.
- Lower productivity increases through 2025, resulting in higher provider payment updates.
- Higher projected drug rebates.
- Change in projection methodology of drug spending for Part B patients with end-stage renal disease.

The net impact of these changes resulted in an increase in the estimated future net cash flow for total Medicare. For Part A, these changes resulted in an increase to the present value of estimated future expenditures and income, with an overall increase in the estimated future net cash flow. For Part B, these changes increased the present value of estimated future expenditures (and also income). For Part D, these changes decreased the present value of estimated expenditures (and also income). Overall, the net impact of these changes caused the present value of the estimated future net cash flows to decrease by $0.3 trillion.

Changes in Law

From the period beginning on January 1, 2017 to the period beginning on January 1, 2018

Most of the provisions enacted as part of Medicare legislation since the prior valuation date had little or no impact on the program. The following provisions did have a financial impact on the present value of the 75-year estimated future income, expenditures, and net cash flow.

- The *Disaster Tax Relief and Airport and Airway Extension Act of 2017* (P.L. 115-63, enacted on September 29, 2017) included one provision that affects the HI and SMI Part B programs.

- *An Act to Provide for Reconciliation Pursuant to Titles II and V of the Concurrent Resolution on the Budget for Fiscal Year 2018* (P.L. 115-97, enacted on December 22, 2017, and also referred to as the Tax Cuts and Jobs Act of 2017) included three provisions that affect the HI program.
- *An Act Making Further Continuing Appropriations for the Fiscal Year Ending September 30, 2018*, and for Other Purposes (P.L. 115-120, enacted on January 22, 2018) included one provision that affects the HI and SMI programs.
- The *BBA of 2018* (P.L. 115-123, enacted on February 9, 2018) included provisions that affect the HI and SMI programs.

Overall, these provisions resulted in a decrease in the estimated future net cash flow for total Medicare. For Part A, these changes resulted in an increase to the present value of estimated future expenditures and a slight decrease to the present value of estimated future income, with an overall net decrease in the estimated future net cash flow. For Part B and Part D, these changes increased the present value of estimated future expenditures (and also income). Overall, these changes to these assumptions caused the present value of the estimated future net cash flows to decrease by $1.0 trillion.

From the period beginning on January 1, 2016 to the period beginning on January 1, 2017

The monetary effect of the changes in law or policy on the present value of estimated future net cash flows of the Medicare programs was not significant at the consolidated level. Please refer to HHS's financial statements for further information related to the impact of the changes in law or policy on the present value of estimated future net cash flows of the Medicare programs.

Change in Projection Base

From the period beginning on January 1, 2017 to the period beginning on January 1, 2018

Actual income and expenditures in 2017 were different than what was anticipated when the 2017 Medicare Trustees Report projections were prepared. Part A payroll tax income in 2017 was lower attributable to lowered wages and expenditures were higher than anticipated based on actual experience. Part B total income and expenditures were higher than estimated based on actual experience. For Part D, actual income and expenditures were both lower than prior estimates. The net impact of the Part A, B, and D projection base changes is a decrease in the estimated future net cash flow. Actual experience of the Medicare Trust Funds between January 1, 2017 and January 1, 2018 is incorporated in the current valuation and is less than projected in the prior valuation. Overall, the net impact of the Part A, B, and D projection base changes is a decrease in the estimated future net cash flows by $0.9 trillion.

From the period beginning on January 1, 2016 to the period beginning on January 1, 2017

Actual income and expenditures in 2016 were different than what was anticipated when the 2016 Medicare Trustees Report projections were prepared. Part A payroll tax income in 2017 was lower attributable to lowered wages, and expenditures were higher than anticipated based on actual experience. Part B total income and expenditures were higher than estimated based on actual experience. For Part D, actual income and expenditures were both lower than prior estimates. The net impact of the Part A, B, and D projection base changes is an increase in the estimated future net cash flow. Actual experience of the Medicare Trust Funds between January 1, 2016 and January 1, 2017 is incorporated in the current valuation and is slightly more than projected in the prior valuation. Overall, the net impact of the Part A, B, and D projection base changes is an increase in the estimated future net cash flows by $0.7 trillion.

Other

The present values included in the SCSIA for the Railroad Retirement program are for the current and prior valuation and are based on various employment, demographic, and economic assumptions that reflect the RRB's reasonable estimate of expected future financial and actuarial status of the trust funds. For a more detailed description of the primary reasons for the changes in the 2018 and 2017 SCSIA, refer to RRB's financial statements.

The significant assumptions used in the projections of the Black Lung social insurance program, referenced earlier in this note, affect the amounts reported on the SCSIA, which presents the net change in the open group measure of the BLDTF for the years ended September 30, 2018 and 2017, and provide information about the change. For a more detailed description of the primary reasons for the changes in the 2018 and 2017 SCSIA, refer to DOL's financial statements.

Note 23. Long-Term Fiscal Projections

The SLTFP are prepared pursuant to SFFAS No. 36, *Comprehensive Long-Term Projections for the U.S. Government*, as amended. The basic financial statement, Note 23, and related unaudited required supplementary information (RSI) provide information to aid readers of the *Financial Report* in assessing whether current policies for federal spending and taxation can be sustained and the extent to which the cost of public services received by current taxpayers will be shifted to future taxpayers. This assessment requires prospective information about receipts and spending, the resulting debt, and how these amounts relate to the size of the economy. A sustainable policy is defined as one where the ratio of federal debt held by the public to GDP (the debt-to-GDP ratio) is ultimately stable or declining. The *Financial Report* does not address the sustainability of State and local government fiscal policy.

The projections and analysis presented here are extrapolations based on an array of assumptions described in detail below. A fundamental assumption is that current federal policy will not change. This assumption is made so as to inform the question of whether current fiscal policy is sustainable and, if it is not sustainable, the magnitude of needed reforms to make fiscal policy sustainable. The projections are therefore neither forecasts nor predictions. If policy changes are implemented, perhaps in response to projections like those presented here, then actual financial outcomes will be different than those projected. The methods and assumptions underlying the projections are subject to continuing refinement.

The projections focus on future cash flows, and do not reflect either the accrual basis or the modified-cash basis of accounting. These cash-based projections reflect receipts or spending at the time cash is received or when a payment is made by the government. In contrast, accrual-based projections would reflect amounts in the time period in which income is earned or when an expense or obligation is incurred. The cash basis accounting underlying the long-term fiscal projections is consistent with methods used to prepare the SOSI and the generally cash-based federal budget.

The basic financial statement, Long-Term Fiscal Projections for the U.S. Government, displays the present value of 75-year projections for various categories of the federal government's receipts and non-interest spending.[9] The projections for fiscal years 2018 and 2017 are expressed in present value dollars and as a percent of the present value of GDP[10] as of September 30, 2018 and September 30, 2017, respectively. The present value of a future amount, for example $1 billion in October 2093, is the amount of money that if invested on September 30, 2018 in an account earning the government borrowing rate would have a value of $1 billion in October 2093.[11]

The present value of a receipt or spending category over 75 years is the sum of the annual present value amounts. When expressing a receipt or spending category over 75 years as a percent of GDP, the present value dollar amount is divided by the present value of GDP over 75 years. Measuring receipts and spending as a percent of GDP is a useful indicator of the economy's capacity to sustain federal government programs.

Fiscal Projections

Receipt categories in the long-term fiscal projections include individual and corporate income taxes, Social Security and Medicare payroll taxes, and a residual remaining category of "other receipts." Non-interest spending categories include discretionary spending that is funded through annual appropriations, such as spending for national security; and mandatory (entitlement) spending that is generally funded with permanent or multi-year appropriations, such as spending for Social Security and Medicare. This year's projections for Social Security and Medicare are based on the same economic and demographic assumptions that underlie the 2018 Social Security and Medicare trustees' reports and the 2018 SOSI, while comparative information presented from last year's report is based on the 2017 Social Security and Medicare trustees' reports and the 2017 SOSI[12]. Projections for the other categories of receipts and spending are consistent with the economic and demographic assumptions in the trustees' reports. The projections assume the continuance of current policy which, as is explained below, can be different than current law in cases where lawmakers have in the past periodically changed the law in a consistent way.

The projections shown in the basic statement are made over a 75-year time frame, consistent with the time frame featured in the Social Security and Medicare trustees' reports. However, these projections are for fiscal years starting on

[9] For the purposes of this analysis, spending is defined in terms of outlays. In the context of federal budgeting, spending can either refer to budget authority – the authority to commit the government to make a payment; to obligations – binding agreements that will result in payments, either immediately or in the future; or to outlays – actual payments made.

[10] GDP is a standard measure of the overall size of the economy and represents the total market value of all final goods and services produced domestically during a given period of time. The components of GDP are: private sector consumption and investment, government consumption and investment, and net exports (exports less imports). Equivalently, GDP is a measure of the gross income generated from domestic production over the same time period.

[11] Present values recognize that a dollar paid or collected in the future is worth less than a dollar today because a dollar today could be invested and earn interest. To calculate a present value, future amounts are thus reduced using an assumed interest rate, and those reduced amounts are summed.

[12] Social Security and Medicare Trustees' Reports can be found at https://www.ssa.gov/OACT/TR/.

October 1, whereas the trustees' reports feature calendar-year projections. Using fiscal years allows the projections to start from the actual budget results from fiscal years 2018 and 2017.

Changes in Long-Term Fiscal Projections Present Value (PV) of 75-Year Projections	**Trillions of $**	**Percent of GDP**
Receipts less non-interest spending as of September 30, 2017.......	(16.2)	(1.2) %
Components of Change:		
Change due to Economic and Demographic Assumptions............	1.2	0.1
Change due to Program-Specific Actuarial Assumptions...............	(3.8)	(0.3)
Change due to Updated Budget Data.......................................	(15.4)	(1.1)
Change in Reporting Period...	(0.5)	-
Change in Model Technical Assumptions..................................	(11.5)	(0.8)
Total	(29.9)	(2.1)
Receipts less non-interest spending as of September 30, 2018.......	(46.2)	(3.3)

Note: Totals may not equal the sum of components due to rounding.

This year's estimate of the 75-year present value imbalance of receipts less non-interest spending is 3.3 percent of the 75-year present value of GDP, compared to 1.2 percent as was projected in last year's *Financial Report*.[13] The above table reports the effects of various factors on the updated projections.

- The largest factor, increasing the imbalance by 1.1 percent of the 75-year present value of GDP ($15.4 trillion), is attributable to actual budget results for fiscal year 2018 and the budgetary estimates published in the 2019 Midsession Review. This includes lower corporate and individual income tax receipts resulting from the TCJA of 2017, and higher non-defense discretionary outlays as a result of the increased discretionary spending caps in the BBA.
- The second largest factor is the effect of adjustments to the model's technical assumptions, which increases the imbalance by 0.8 percent of the 75-year present value of GDP ($11.5 trillion). As discussed below in the section on assumptions used in the projections, corporate income tax receipts are held to their proportion of the budget's share of GDP to reflect enactment of the TCJA of 2017. Discretionary spending is assumed to grow from the 2019 cap levels established in the BBA, subject to Joint Select Committee on Deficit Reduction (Joint Committee) sequestration enforcement[14].
- The third largest factor, increasing the imbalance by 0.3 percent of the 75-year present value of GDP ($3.8 trillion) is due to changes in Social Security, Medicare and Medicaid actuarial assumptions[15].
- The next largest change in the table – decreasing the imbalance by 0.1 percent of GDP ($1.2 trillion) – is attributable to changes in economic and demographic assumptions. Higher near-term wage and GDP projections increased individual income tax and social insurance receipts.

The penultimate row in the basic financial statement shows that this year's estimate of the overall 75-year present value of receipts less non-interest spending is -3.3 percent of the 75-year present value of GDP (negative $46.2 trillion, as compared to GDP of $1,406.3 trillion). This imbalance can be broken down by funding source. Spending exceeded receipts by 1.7 percent of GDP ($24.2 trillion) among programs funded by the government's general revenues, and there is an imbalance of 1.6 percent of GDP ($22.1 trillion[16]) for the combination of Social Security (OASDI) and Medicare Part A,

[13] More information on the projections in last year's *Financial Report* can be found in Note 23 to the Financial Statements here: https://fiscal.treasury.gov/reports-statements/#

[14] For further discussion of spending assumptions, see the section "Assumptions Used and Relationship to Other Financial Statements" below.

[15] For more information on Social Security, Medicare and Medicaid actuarial estimates, refer to Note 22—Social Insurance.

[16] The 75-year present value imbalance for Social Security and Medicare Part A of $22.1 trillion is comprised of several line items from the SLTFP – Social Security outlays net of Social Security payroll taxes ($22.0 trillion) and Medicare Part A outlays net of Medicare payroll taxes ($8.8 trillion) – as well as subcomponents of these programs not presented separately in the statement. These subcomponents include Social Security and Medicare Part A administrative costs that are classified as non-defense discretionary spending ($0.7 trillion) and Social Security and Medicare Part A income other than payroll taxes: taxation of benefits (-$4.4 trillion), federal employer share (-$1.3 trillion), and other income (-$3.7 trillion).

which under current law are funded with payroll taxes and not in any material respect with general revenues.[17, 18] By comparison, the fiscal year 2017 projections showed that programs funded by the government's general revenues had an excess of receipts over spending of 0.2 percent of GDP ($3.3 trillion) while the payroll tax-funded programs had an imbalance of spending over receipts of 1.5 percent of GDP ($19.6 trillion).

Sustainability and the Fiscal Gap

As discussed further in the unaudited RSI, the projections in this report indicate that current policy is not sustainable. If current policy is left unchanged, the projections show the debt-to-GDP ratio will rise about 6 percentage points to a level of 84 percent by 2022, exceed 100 percent by 2030, and reach 530 percent in 2093. Moreover, if the trends that underlie the 75-year projections were to continue, the debt-to-GDP ratio would continue to rise beyond the 75-year window.

The fiscal gap measures how much the primary surplus (receipts less non-interest spending) must increase in order for fiscal policy to achieve a target debt-to-GDP ratio in a particular future year. In these projections, the fiscal gap is estimated over a 75-year period, from 2019 to 2093, and the target debt-to-GDP ratio is equal to the ratio at the beginning of the projection period, in this case the debt-to-GDP ratio at the end of fiscal year 2018.

The 75-year fiscal gap under current policy is estimated at 4.1 percent of GDP, which is 21.9 percent of the 75-year present value of projected receipts and 18.6 percent of the 75-year present value of non-interest spending. This estimate of the fiscal gap is 2.1 percentage points larger than was estimated in 2017 (2.0 percent of GDP).

The projections show that projected primary deficits average 3.2 percent of GDP over the next 75 years under current policy. If policies were put in place that would result in a zero fiscal gap, the average primary surplus over the next 75 years would be 0.8 percent of GDP, 4.1 percentage points higher than the projected present value of receipts less non-interest spending shown in the basic financial statement. In these projections, closing the fiscal gap requires running a substantially positive level of primary surplus, rather than simply eliminating the primary deficit. The primary reason is that the projections assume future interest rates will exceed the growth rate of GDP. Achieving primary balance (that is, running a primary surplus of zero) implies that the debt held by the public grows each year by the amount of interest spending, which under these assumptions would result in debt growing faster than GDP.

Assumptions Used and Relationship to Other Financial Statements

A fundamental assumption underlying the projections is that current federal policy (defined below) does not change. The projections are therefore neither forecasts nor predictions, and do not consider large infrequent events such as natural disasters, military engagements, or economic crises. By definition, they do not build in future changes to policy, such as recent proposals to repeal the ACA or increase border infrastructure and security. If policy changes are enacted, perhaps in response to projections like those presented here, then actual fiscal outcomes will be different than those projected.

Even if policy does not change, actual spending and receipts could differ materially from those projected here. Long-range projections are inherently uncertain and are necessarily based on simplifying assumptions. For example, one key simplifying assumption is that interest rates paid on debt held by the public remain unchanged, regardless of the amount of debt outstanding. To the contrary, it is likely that future interest rates would increase if the debt-to-GDP ratio rises as shown in these projections. To help illustrate this uncertainty, projections that assume higher and lower interest rates are presented in the "Alternative Scenarios" discussion in the unaudited RSI section of this *Financial Report*.

As is true for prior long-term fiscal projections for the *Financial Report*, the assumptions for GDP, interest rates, and other economic and demographic variables underlying this year's projections are the same assumptions that underlie the most recent Social Security and Medicare trustees' report projections, adjusted for historical revisions that occur annually. The use

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[17] Social Security and Medicare Part A expenditures can exceed payroll tax revenues in any given year to the extent that there are sufficient balances in the respective trust funds; these balances derive from past excesses of payroll tax revenues over expenditures and interest earned on those balances and represent the amount the General Fund owes the respective trust fund programs. When spending does exceed payroll tax revenues, as has occurred each year since 2008 for Medicare Part A and 2010 for Social Security, the excess spending is financed first with interest due from the General Fund and secondly with a drawdown of the trust fund balance; in either case, the spending is ultimately supported by general revenues or borrowing. Under current law, benefits for Social Security and Medicare Part A can be paid only to the extent that there are sufficient balances in the respective trust funds. In order for the long-term fiscal projections to reflect the full size of these program's commitments to pay future benefits, the projections assume that all scheduled benefits will be financed with borrowing to the extent necessary after the trust funds are depleted.

[18] The fiscal imbalances reported in the long-term fiscal projections are limited to future outlays and receipts. They do not include the initial level of publicly-held debt, which was $15.8 trillion in 2018 and $14.7 trillion in 2017, and therefore they do not by themselves answer the question of how large fiscal reforms must be to make fiscal policy sustainable, or how those reforms divide between reforms to Social Security and Medicare Part A and to other programs. Other things equal, past cash flows (primarily surpluses) for Social Security and Medicare Part A reduced federal debt at the end of 2018 by $3.1 trillion (the trust fund balances at that time); the contribution of other programs to federal debt at the end of 2018 was therefore $18.9 trillion. Because the $22.1 trillion imbalance between outlays and receipts over the next 75 years for Social Security and Medicare Part A does not take account of the Social Security and Medicare Part A trust fund balances, it overstates the magnitude of reforms necessary to make Social Security and Medicare Part A solvent over 75 years by $3.1 trillion. The $3.1 trillion combined Social Security and Medicare Part A trust fund balance represents a claim on future general revenues.

of discount factors consistent with the Social Security trustees' rate allows for consistent present value calculations over 75 years between the SLTFP and the SOSI.

The following bullets summarize the key assumptions used for the categories of receipts and spending presented in the basic financial statement and the disclosures:

- **Social Security:** Projected Social Security (OASDI) spending excludes administrative expenses, which are classified as discretionary spending, and is based on the projected expenditures in the 2018 Social Security trustees' report for benefits and for the Railroad Retirement interchange. The projections of Social Security payroll taxes and Social Security spending are based on future spending and payroll taxes projected in the 2018 Social Security trustees' report, adjusted for presentational differences and converted to a fiscal year basis. More information about the assumptions for Social Security cost growth can be found in Note 22 and the unaudited RSI discussion of Social Insurance.
- **Medicare:** Projected Medicare spending also excludes administrative expenses, which are classified as other mandatory spending, and is based on projected incurred expenditures from the 2018 Medicare trustees' report. The projections here make some adjustments to the trustees' report projections. Medicare Part B and D premiums, as well as State contributions to Part D, are subtracted from gross spending in measuring Part B and Part D spending, just as they are subtracted from gross cost to yield net cost in the financial statements.[19] Here, as in the federal budget, premiums are treated as "negative spending" rather than receipts since they represent payment for a service rather than payments obtained through the government's sovereign power to tax. This is similar to the financial statement treatment of premiums as "earned" revenue as distinct from all other sources of revenue, such as taxes. The projections are based on Medicare spending in the Medicare trustees' report, adjusted for presentational differences and converted to a fiscal year basis. Medicare Part A payroll taxes are projected similarly. More information about the assumptions for Medicare cost growth can be found in Note 22 and the unaudited RSI discussion of Social Insurance. As discussed in Note 22, there is uncertainty about whether the reductions in health care cost growth projected in the Medicare trustees' report will be fully achieved. Note 22 illustrates this uncertainty by considering Medicare cost growth assumptions under varying policy assumptions.
- **Medicaid:** The Medicaid spending projections start with the projections from the *2017 Medicaid Actuarial Report* prepared by CMS's Office of the Actuary[20]. These projections are based on recent trends in Medicaid spending; the demographic, economic, and health cost growth assumptions in the 2017 Medicare Trustees' Report; and projections of the effect of the ACA on Medicaid enrollment. The projections, which end in 2026, are adjusted to accord with the actual Medicaid expenditures in fiscal year 2018. After 2026, the projections assume no further change in State Medicaid coverage under the ACA, and the numbers of old-age beneficiaries (65-plus years) and non-old-age beneficiaries (less than 65 years) are expected to grow at the same rates as the old-age and non-old-age populations, respectively. Medicaid costs per beneficiary are assumed to grow at the same rate as Medicare benefits per beneficiary, as is generally consistent with the experience since 1987. Between 1987 and 2017, the average annual growth rate of spending per beneficiary for Medicaid and Medicare were within 0.3 percentage point of each other. Projections of Medicaid spending are subject to added uncertainty related to: (1) assumed reductions in health care cost growth discussed above in the context of Medicare, (2) the projected size of the Medicaid enrolled population, which depends on a variety of factors, including future State actions regarding the ACA Medicaid expansion, and (3) certain limitations relating to the data used to generate the projected per enrollee expenditures in the 2017 Medicaid actuarial report.
- **Other Mandatory Spending:** Other mandatory spending, which includes federal employee retirement, veterans' disability benefits, and means-tested entitlements other than Medicaid, is projected in two steps. First, spending prior to the automatic spending cuts called for by the enforcement provisions of the BCA is projected and, second, the effect of the BCA enforcement is projected through its statutory expiration in 2027. With regard to pre-BCA spending: (1) current mandatory spending components that are judged permanent under current policy are assumed to increase by the rate of growth in nominal GDP starting in 2019, implying that such spending will remain constant as a percent of GDP[21]; and (2) projected spending for insurance exchange subsidies starting in 2019 grows with growth in the non-elderly population and with the National Health Expenditure (NHE) projected per enrollee cost growth for other private health insurance for the NHE projection period (through 2026 for the fiscal year 2018 projections), and with growth in per enrollee health care costs as projected for the Medicare program after that period. As discussed in Note 22, there is uncertainty about whether the reductions in health care cost growth

[19] Medicare Part B and D premiums and State contributions to Part D are subtracted from the Part B and D spending displayed in the SLTFP. The total 75-year present value of these subtractions is $13.6 trillion, or 1.0 percent of GDP.

[20] Christopher J. Truffer, Christian J. Wolfe, and Kathryn E. Rennie, *2017 Actuarial Report on the Financial Condition for Medicaid*, Office of the Actuary, Centers for Medicare and Medicaid Services, United States Department of Health and Human Services, September 2017.

[21] This assumed growth rate for other mandatory programs exceeds the growth rate in the most recent OMB and CBO 10-year budget baselines.

projected in the Medicare trustees' report will be fully achieved. Projected exchange subsidy spending as a percent of GDP remains below the failsafe provision in the ACA that limits this spending to 0.504 percent of GDP.

- **Defense and Non-defense Discretionary Spending:** Prior to 2018, the projections assumed discretionary spending followed the caps established by the BCA of 2011, as later amended, and then grew with nominal GDP in the years after the caps expired. However, discretionary spending has not been limited to the caps established in the BCA. Instead, budget deals in 2013, 2015, and 2018 raised the caps in each of the years 2014 through 2019. Therefore, as a reasonable representation of current policy, the 2018 projections assume discretionary spending is grown at the same rate as nominal GDP beginning after 2019, rather than being limited to the statutory caps, subject to Joint Committee spending controls[22]. Projected OCO spending, which is not subject to the caps, is assumed to grow from the level in the most recent year at the same rate as nominal GDP. To illustrate sensitivity to different assumptions, present value calculations under alternative discretionary growth scenarios are presented in the unaudited "Alternative Scenarios" RSI section.
- **Receipts (Other than Social Security and Medicare Payroll Taxes):** Individual income taxes equal the same share of wages and salaries as in the current law baseline projection in the President's fiscal year 2019 Budget. That baseline accords with current policy as defined above, including the continuation of the individual income, estate, and gift tax provisions of the TCJA of 2017[23] and the tendency of effective tax rates to increase as growth in income per capita outpaces inflation (also known as "bracket creep"). After reaching about 20 percent of wages and salaries in 2024, individual income taxes increase gradually to 27 percent of wages and salaries in 2093 as real taxable incomes rise over time and an increasing share of total income is taxed in the higher tax brackets. Through the first 10 years of the projections, corporate tax receipts as a percent of GDP reflect the economic and budget assumptions used in developing the 2019 Midsession Review's ten-year advance budgetary estimates[24]. After this time, corporate tax receipts grow at the same rate as nominal GDP. All other receipts also reflect 2019 Midsession Review levels as a share of GDP throughout the budget window and grow with GDP outside of the budget window. Corporate tax receipts peak at 1.6 percent of GDP in 2025 before falling to 1.3 percent of GDP in 2028, where they stay for the remainder of the projection period. The ratio of all other receipts combined, excluding corporate tax receipts, to GDP is estimated to be 1.5 percent in 2019, after which it gradually declines to 1.3 percent of GDP, where it remains through the projection period. To illustrate uncertainty, present value calculations under higher and lower receipts growth scenarios are presented in the "Alternative Scenarios" section.
- **Debt and Interest Spending:** Interest spending is determined by projected interest rates and the level of outstanding debt held by the public. The long-run interest rate assumptions accord with those in the 2018 Social Security trustees' report.[25] The average interest rate over the projection period is 5.0 percent. These rates are also used to convert future cash flows to present values as of the start of fiscal year 2019. Debt at the end of each year is projected by adding that year's deficit and other financing requirements to the debt at the end of the previous year.

The methods described above include two significant revisions from those used to produce the fiscal year 2017 projections. Corporate tax receipts are now projected separately from all other receipts to incorporate the effects of the TCJA of 2017. In prior years, corporate income tax receipts were not modeled independently, they were included in "Other Receipts[26]." To project corporate income tax receipts, the model uses their implied share of GDP over the years 2019 through 2028 from the 2019 Midsession Review to determine receipts in those years, and then grows receipts with nominal GDP thereafter. "Other Receipts" are now projected similarly; instead of using their 30-year historical average share of GDP, the receipts' implied share of GDP over the years 2019 to 2028, as presented in the 2019 Midsession Review, are used to determine receipts over this period. Afterward, receipts grow with GDP. The second significant revision is that discretionary spending no longer follows the caps established under the BCA through 2021. Instead, discretionary spending starts from the outlays implied by BBA 2018's cap level for 2019, and grows with GDP thereafter (subject to Joint Committee enforcement).

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[22] The BCA of 2011 established statutory caps on discretionary spending for fiscal years 2012 through 2021, and established a Joint Committee tasked with identifying $1.2 trillion in deficit reduction. The failure of the Joint Committee to propose, and Congress to enact, legislation sufficient to reduce the deficit triggers automatic spending reductions through adjustments to the discretionary spending limits and sequestration of mandatory spending. Mandatory sequestration has been extended in various statutes and currently extends through 2027. After 2027, the projections assume the automatic reductions continue as a constant share of projected GDP.

[23] The expiring individual income and estate and gift tax provisions of the TCJA are assumed to continue past their legal expiration on December 31, 2025 because of the recent historical pattern of such tax rates being extended; additional discussion may be found in the last section of this note.

[24] The Midsession Review is an annual report to the Congress, delivered on or before July 15th, that contains revised budget estimates resulting from changes in economic assumptions, Presidential initiatives, and enacted legislation that have occurred since transmittal of the President's Budget.

[25] As indicated in the more detailed discussion of Social Insurance in Note 22 to the financial statements.

[26] "Other receipts", which included corporate income tax receipts prior to 2018, were modeled by assuming they maintain their 30-year historical average share of GDP throughout the modeling period.

Departures of Current Policy from Current Law

The long-term fiscal projections are made on the basis of current policy, which in some cases is different from current law. The notable differences between current policy that underlies the projections and current law are: (1) discretionary spending is assumed to not be limited by caps established by the BCA; (2) projected spending, receipts, and borrowing levels assume raising or suspending the current statutory limit on federal debt; (3) continued discretionary appropriations are assumed throughout the projection period; (4) scheduled Social Security and Medicare benefit payments are assumed to occur beyond the projected point of trust fund depletion; (5) many mandatory programs with expiration dates prior to the end of the 75-year projection period are assumed to be reauthorized; and (6) tax changes under the TCJA are assumed to continue beyond 2025. The last difference aligns with the historical pattern of such legislation being routinely extended or made permanent. As is true in the Medicare trustees' report and in the SOSI, the projections incorporate programmatic changes already scheduled in law, such as the ACA productivity adjustment for non-physician Medicare services and the expiration of certain physician bonus payments in 2025.

Note 24. Stewardship Land and Heritage Assets

Stewardship PP&E consists of items whose physical properties resemble those of general PP&E traditionally capitalized in financial statements. However, stewardship PP&E differs from general PP&E in that their values may be indeterminable or may have little meaning (for example, museum collections, monuments, assets acquired in the formation of the nation) or that allocating the cost of such assets to accounting periods that benefit from the ownership of such assets is meaningless. Stewardship PP&E includes stewardship land (land not acquired for or in connection with general property, plant, and equipment) and heritage assets (for example, federal monuments and memorials and historically or culturally significant property). The majority of stewardship land was acquired by the government during the first century of the nation's existence.

Investments in stewardship land are reported on a non-financial basis. For example, measurement may be based on physical units, such as acres of land. National forests, parks, and historic sites are examples of stewardship land.

Additional detailed information concerning stewardship land, such as entity stewardship policies, physical units by major categories, and the condition of stewardship land, can be obtained from the financial statements of DOI, DOD, TVA, and USDA.

Heritage assets are government-owned assets that have one or more of the following characteristics:

- Historical or natural significance;
- Cultural, educational, or artistic importance; or
- Significant architectural characteristics.

Like stewardship land, heritage assets are also reported on a non-financial basis. Measurement may be reported by the total units, such as the total number of National Parks reported by DOI. The public entrusts the government with these assets and holds it accountable for their preservation. Examples of heritage assets include the Declaration of Independence, the U.S. Constitution, and the Bill of Rights preserved by the National Archives. Also included are national monuments/structures such as the Washington Monument, the Lincoln Memorial and the LOC. Many other sites such as battlefields, historic structures, and national historic landmarks are placed in this category, as well.

Heritage assets are classified into two categories: collection and non-collection. Collection type heritage assets include objects gathered and maintained for exhibition, for example, museum collections, art collections, and library collections. Non-collection type heritage assets include parks, memorials, monuments, and buildings. In some cases, heritage assets may serve two purposes: a heritage function and general government operations. In those cases, the heritage asset should be considered a multi-use heritage asset if the predominant use of the asset is in general government operations (e.g., the main Treasury building used as an office building). The cost of acquisition, improvement, reconstruction, or renovation of multi-use heritage assets should be capitalized as general PP&E and depreciated over its estimated useful life.

This discussion of the government's heritage assets is not exhaustive. Rather, it highlights significant heritage assets reported by federal entities. Please refer to the individual financial statements of the DOC, VA, DOT, State, DOD, as well as websites for the LOC (https://loc.gov), the Smithsonian Institution (https://si.edu), and the Architect of the Capitol (https://aoc.gov) for additional information on multi-use heritage assets, entity stewardship policies, and physical units by major categories.

Note 25. Disclosure Entities and Related Parties

SFFAS No. 47, *Reporting Entity* provides criteria for identifying organizations that are consolidation entities, disclosure entities and related parties, and how such organizations are reported within the *Financial Report*. For consolidation entities, the assets, liabilities, results of operations, and related activity are consolidated into the government's financial statements. For disclosure entities and related parties, balances and transactions with such entities are included in the financial statements and certain information about their relationship with the federal government is disclosed in the notes to the consolidated financial statements. Disclosure entities and related parties are important to the *Financial Report* but are not consolidated into the government's financial statements.

Disclosure Entities

Disclosure entities are organizations similar to consolidation entities in that they are either (a) in the budget, (b) majority owned by the government, (c) controlled by the government, or (d) would be misleading to exclude. Disclosure entities have a greater degree of autonomy with the government than consolidation entities. In addition, organizations may be owned or controlled by the government as a result of (a) regulatory actions (such as organizations in receivership or conservatorship) or (b) other government intervention actions. Under such regulatory or other intervention actions, if the relationship with the government is not expected to be permanent, such entities generally would be classified as disclosure entities based on their characteristics taken as a whole.

Based on the criteria in GAAP for federal entities, the disclosure entities in the *Financial Report* are FR System, Fannie Mae, Freddie Mac, and National Railroad Passenger Corporation (more commonly referred to as Amtrak). In addition, there are additional disclosure entities reported by component reporting entities that do not meet the qualitative or quantitative criteria in SFFAS No. 47 to be reported in the *Financial Report*.

Federal Reserve System

Congress, under the *Federal Reserve Act of 1913* (Federal Reserve Act), created the FR System. The FR System includes the Federal Reserve Board of Governors (Board), the FRBs, and Federal Open Market Committee (FOMC). Collectively, the FR System serves as the nation's central bank and is responsible for formulating and conducting monetary policy, issuing and distributing currency (Federal Reserve Notes), supervising and regulating financial institutions, providing nationwide payment systems (including large-dollar transfers of funds, Automated Clearing House (ACH) operations, and check collections), providing certain financial services to federal entities and fiscal principals, and serving as the U.S. government's bank. Monetary policy includes actions undertaken by the FR System that influence the availability and cost of money and credit as a means of helping to promote national economic goals. The FR System also conducts operations in foreign markets in order to counter disorderly conditions in exchange markets or to meet other needs specified by the FOMC to carry out its central bank responsibilities. The FR System is considered an independent central bank, and the executive branch of the government does not ratify its decisions.

The 12 FRBs are chartered under the Federal Reserve Act, which requires each member bank to own the capital stock of its FRB. Each FRB has a board of directors that exercises supervision and control of each FRB, with three members appointed by the Board, and six board members elected by their member banks. The FRBs participate in formulating and conducting monetary policy, distributing currency and coin, and serving as the government's fiscal agent, as well as the fiscal agent for other federal entities and fiscal principals. Fiscal principals, generally speaking, relate to banks, credit unions, savings and loans institutions. Additionally, the FRBs provide short-term loans to depository institutions and loans to participants in programs or facilities with broad-based eligibility in unusual and crucial circumstances when approved by the Board and the Secretary of the Treasury.

The government interacts with FRBs in a variety of ways, including the following:

- The FRBs serve as the government's fiscal agent and depositary, executing banking and other financial transactions on the government's behalf. The government reimburses the FRBs for these services, the cost of which is included on the Statements of Net Cost;
- The FRBs hold Treasury and other federal securities in the FRBs' System Open Market Account (SOMA) for the purpose of conducting monetary policy (see Note 11—Federal Debt Securities Held by the Public and Accrued Interest);
- The FRBs hold gold certificates issued by the government in which the certificates are collateralized by gold (see Note 2—Cash and Other Monetary Assets);
- The FRBs hold SDR certificates issued by the government which are collateralized by SDRs (see Note 2—Cash and Other Monetary Assets); and,

- The FRBs are required by Board policy to transfer their excess earnings to the government, which are included in Other Taxes and Receipts on the Statements of Operations and Changes in Net Position.

- **Federal Reserve System Structure**

The Board is an independent organization governed by seven members who are appointed by the President and confirmed by the Senate. The full term of a Board member is 14 years, and the appointments are staggered so that one term expires on January 31 of each even-numbered year. The Board has a number of supervisory and regulatory responsibilities for institutions including, among others, state-chartered banks that are members of the FR System, bank holding companies, and savings and loan holding companies. In addition, the Board has general supervisory responsibilities for the 12 FRBs, and issues currency (Federal Reserve Notes) to the FRBs for distribution.

The FOMC is comprised of the seven Board members and five of the 12 FRB presidents, and is charged with formulating and conducting monetary policy primarily through open market operations (the purchase and sale of certain securities in the open market), the principal tool of national monetary policy. These operations affect the amount of reserve balances available to depository institutions, thereby influencing overall monetary and credit conditions.

The 12 FRBs are chartered under the Federal Reserve Act, which requires each member bank to own the capital stock of its FRB. Supervision and control of each FRB is exercised by a board of directors, of which three are appointed by the Board of the FR System, and six are elected by their member banks. The FRBs participate in formulating and conducting monetary policy, distribute currency and coin, and serve as fiscal agents for the government, and other federal entities. Additionally, the FRBs provide short-term loans to depository institutions and loans to participants in programs or facilities with broad-based eligibility in unusual and exigent circumstances when approved by the Board and the Secretary of the Treasury.

- **Federal Reserve Monetary Policy Action**

During fiscal year 2018, the Federal Reserve FOMC gradually raised its target range for the federal funds rate and gradually reduced its securities in the SOMA. The Federal Reserve raised its target range for the federal funds rate from 1.0 – 1.25 percent in September 2017, to 2.0 – 2.25 percent in September 2018. The Federal Reserve reduced its U.S. Treasury and federal agency and government-sponsored enterprise mortgage-backed securities in the SOMA on its balance sheet from approximately $4.4 trillion as of September 30, 2017, to approximately $4.1 trillion as of September 30, 2018.

- **Federal Reserve System Assets, Liabilities, Revenues, Expenses, Gains, and Losses**

The FRBs hold Treasury and other securities in the SOMA for the purpose of conducting monetary policy. As of September 30, 2018, Treasury securities held by the FRBs totaled $1,782.5 billion, which excludes $531.8 billion in Treasury Securities used in overnight reverse repurchase transactions. As of September 30, 2017, Treasury securities held by the FRBs totaled $1,964.7 billion, which excludes $502.0 billion in Treasury securities used in overnight reverse repurchase transactions. Such securities are included in federal debt securities held by the public and accrued interest (see Note 11—Federal Debt Securities Held by the Public and Accrued Interest). For fiscal years ended September 30, 2018, and 2017, Treasury incurred interest cost relating to the FRB's U.S. Treasury holdings amounting to $64.1 billion and $63.8 billion, respectively, which is included in interest on Treasury securities held by the public on the Statement of Net Cost. Unrestricted Cash held on deposit at the FRBs as of September 30, 2018, and 2017, was $378.5 billion and $153.3 billion, respectively, and are included in cash and other monetary assets. In addition, restricted cash as of September 30, 2018, and 2017, was $31.6 billion and $26.1 billion, respectively; a significant portion is held on deposit at the FRBs (see Note 2—Cash and Other Monetary Assets).

Treasury securities are generally subject to the same market (principally interest-rate) and credit risks as other financial instruments. In the open market, the FRBs purchase and sell Treasury securities as a mechanism for controlling the money supply.

Financial and other information concerning the FR System, including financial statements for the Board and the FRBs, may be obtained at https://federalreserve.gov.

- **FRB Residual Earnings Transferred to the Government**

FRBs generate income from interest earned on securities, reimbursable services provided to federal entities, and the provision of priced services to depository institutions, as specified by the *Monetary Control Act of 1980*. Although the FRBs generate earnings from carrying out open market operations (via the earnings on securities held in the SOMA account), their execution of these operations is for the purpose of accomplishing monetary policy rather than generating earnings. Each FRB is required by Board policy to transfer to the government its residual (or excess) earnings, after providing for the cost of operations, payment of dividends, and surplus funds not to exceed an FRB's allocated portion of an aggregate of $7.5 billion for all FRBs. These residual earnings may vary due to, among other things, changes in the SOMA balance levels that may occur in conducting monetary policy. If an FRB's earnings for the year are not sufficient to provide for the cost of operations, payment of dividends, or allocated portion of $7.5 billion aggregate surplus funds limitation, an FRB will suspend its payments to the government until such earnings become sufficient. These funds are part of restricted cash at the Federal Reserve (see Note 2—Cash and Other Monetary Assets). The FRB residual earnings of $70.8 billion and $81.3 billion for fiscal years ended September 30, 2018, and 2017, respectively, are reported as other taxes and receipts on the Statements of Operations and Changes in Net Position. Accounts and taxes receivables, net, includes a receivable for FRB's residual earnings which represents the earnings due to the General Fund as of September 30, but not collected by the General Fund until after the end of the month. As of September 30, 2018, and 2017, accounts receivable on FRB's residual earnings are $0.4 billion and $0.3 billion, respectively (see Note 3—Accounts and Taxes Receivables, Net).

Fannie Mae and Freddie Mac

In 2008, during the financial crisis, the government placed Fannie Mae and Freddie Mac under conservatorship to help ensure their financial stability. For fiscal year 2018, these entities meet the criteria in SFFAS No. 47, for disclosure entities as both (a) "receiverships and conservatorships," and, (b) as entities wherein "federal government intervention actions resulted in control or ownership" with intervention actions not expected to be permanent. Accordingly, these entities are not consolidated into the *Financial Report*. This treatment is consistent with the reporting for these entities in fiscal year 2017 under SFFAC No. 2, *Entity and Display* (see Note 8—Investments in Government-Sponsored Enterprises for additional information).

Amtrak

Amtrak was incorporated in 1971 pursuant to the *Rail Passenger Service Act of 1970* and is authorized to operate a nationwide system of passenger rail transportation. Amtrak is a private, for-profit corporation under 49 U.S.C. § 24301 and District of Columbia law. It is not a department, entity, or instrumentality of the federal government. Amtrak's classification as a disclosure entity is attributed to (a) being listed in the budget, (b) is financed mostly by sources other than taxes, and (c) governed by an independent Board of Directors comprised of 10 directors. The Secretary of Transportation (Secretary), who is a director by statute, and eight of the other Amtrak directors, are appointed by the President with the advice and consent of the U.S. Senate. The 10th board member, appointed by the board, is the President and Chief Executive Officer of Amtrak. Amtrak does not take actions on behalf of the government but benefits the national economy by providing a transportation option in 46 states and the District of Columbia.

The government (through the DOT) owns 100% of Amtrak's preferred stock (109,396,994 shares of $100 par value). Each share of preferred stock is convertible into ten shares of common stock. The common stockholders have voting rights for "amendments to Amtrak's Articles of Incorporation proposed by the Board of Directors and for certain other extraordinary events." Although Section 4.02(g) of the Amtrak Articles of Incorporation allow for the conversion of preferred stock to common stock, the government would not convert its holdings without Congressional authorization. The government does not recognize the Amtrak preferred stock in its financial statements because, under the corporation's current financial structure, the preferred shares do not have a liquidation preference over the common shares, the preferred shares do not have any voting rights, and dividends are neither declared nor in arrears.

In addition to the purchase/ownership of the Amtrak preferred stock, the government has provided funding to Amtrak, since 1972, primarily through grants and loans. Amtrak receives grants from the government that cover a portion of the corporation's annual operating expenses and capital investments. Funding provided to Amtrak through grant agreements are included in the government's annual budget. Amtrak has a history of recurring operating losses and is dependent on subsidies from the government to operate. Amtrak's ability to continue operating in its current form is dependent upon the continued receipt of subsidies from the government.

The government has possession of two long-term notes with Amtrak. The first note is for $4.0 billion and matures in 2975 and, the second note is for $1.1 billion and matures in 2082 with renewable 99-year terms. Interest is not accruing on these notes as long as the current financial structure of Amtrak remains unchanged. If the financial structure of Amtrak changes, both principal and accrued interest are due and payable. The government does not recognize the long-term notes in its financial statements since the notes, with maturity dates of 2975 and 2082, are considered fully uncollectible due to the lengthy terms, Amtrak's history of operating losses, and ability to generate funds for repayment.

Financial and other information concerning Amtrak including financial statements may be obtained at https://www.amtrak.com/reports-documents.

Related Parties

Related parties exist if the existing relationship, or one party to the existing relationship, has the ability to exercise significant influence over the party's policy decisions. Related parties do not meet the principles for inclusion, but are reported in the *Financial Report* if they maintain relationships of such significance that it would be misleading to exclude.

Based on the criteria in SFFAS No. 47, the related parties reported in the *Financial Report* are Federal Home Loan Banks (FHLBanks), IMF, Multilateral Banks, and Private Export Funding Corporation (PEFCO). In addition, there are additional related parties reported by component reporting entities that do not meet the criteria to be reported in the *Financial Report*.

Federal Home Loan Banks

The government is empowered with supervisory and regulatory oversight of the 11 FHLBanks. The government is responsible for ensuring that each regulated entity operates in a safe and sound manner, including maintenance of adequate capital and internal control, and carries out its housing and community development finance missions. Each FHLBank operates as a separate federally chartered corporation with its own board of directors, management, and employees. The FHLBanks were organized under the *Federal Home Loan Bank Act of 1932* and are GSEs. The FHLBanks are not government entities and do not receive financial support from taxpayers. The government does not guarantee, directly or indirectly, the debt securities or other obligations of FHLBanks. The FHLBanks are regulated by the FHFA, an independent federal entity.

By law, in the event of certain adverse circumstances, Treasury is authorized to purchase up to $4.0 billion of obligations of the FHLBanks. Treasury has not used such authority. Also, in accordance with the *Government Corporations Control Act*, Treasury prescribes certain terms concerning the FHLBanks issuance of obligation to the public. Financial and other information concerning FHLBanks including financial statements may be obtained at http://www.fhlbanks.com/.

International Monetary Fund and Multilateral Development Banks

The government currently maintains related party relationships with the IMF and the MDBs. The IMF is an international organization of 189 member countries that works to foster global monetary cooperation, secure financial stability, sustain economic growth, and reduce poverty around the world. The government holds the largest quota subscription of any member. The government's quota subscription serves as the key determinant for the government's 16.5 percent share of voting rights in various IMF decisions for which the government has a substantial voice. Since certain key IMF determinations require approval by at least 85 percent of the total voting power, the government (represented by the Secretary of the Treasury) exercises significant influence via its 16.5 percent voting share. The government's holdings in the IMF are in the form of highly liquid and interest-bearing instruments. The government has a liability due to the IMF, as well as an additional commitment (see Note 16—Other Liabilities and Note 19—Commitments for additional information). Historically, the government has not experienced a loss of value on its IMF holdings and management does not believe it is likely that the government will experience future losses on its holdings or as a result of its additional commitments.

Additionally, the government invests in and provides funding to the MDBs to support poverty reduction and promote sustainable economic growth in developing countries. The MDBs provide financial and technical support to foster economic growth and entrepreneurship, strengthen institutions, address the root causes of instability in fragile and conflict-affected countries, and respond to global crisis. The government's participation in the MDBs is in the form of financial contributions used to ensure the effectiveness and impact of the MDBs' global development agenda. The U.S. has voting power in each of the MDBs to which it contributes, ranging from approximately 6 percent to 50 percent (see Note 19—Commitments for additional information).

Private Export Funding Corporation

The financial statements reflect the results of agreements with PEFCO. PEFCO, which is owned by a consortium of private-sector banks, industrial companies and financial services institutions, makes and purchases from private sector lenders, medium-term and long-term fixed-rate and variable-rate loans guaranteed by EXIM Bank to foreign borrowers to purchase U.S. made equipment "export loans."

EXIM Bank's credit and guarantee agreement with PEFCO provides that EXIM Bank will guarantee the due and punctual payment of interest on PEFCO's secured debt obligations which EXIM Bank has approved, and grants to EXIM Bank a broad measure of supervision over PEFCO's major financial management decisions, including the right to have representatives be present in all meetings of PEFCO's board of directors, advisory board, and exporters' council, and to review PEFCO's financials and other records. However, EXIM Bank does not have voting rights and does not influence normal operations. This agreement extends through December 31, 2020.

In addition, PEFCO has an agreement with EXIM Bank which provides that EXIM Bank will generally provide PEFCO with an unconditional guarantee covering the due and punctual payment of principal and interest on export loans PEFCO makes and purchases. PEFCO's guarantees on the export loans plus the guarantees on the secured debt obligations aggregating to $5,196.6 million at September 30, 2018 and $6,120.0 million at September 30, 2017, are included by EXIM Bank in the total for guarantee, insurance and undisbursed loans and the allowance related to these transactions.

EXIM Bank received fees totaling $40.8 million in fiscal year 2018 and $60.7 million in fiscal year 2017 for the agreements.

Note 26. Subsequent Events

Disaster Relief

In September and October 2018, Hurricanes Florence and Michael struck the continental United States. While the full future effect of these disasters is still unknown, there will be an impact on some federal government entities as a result of assisting these areas as they strive to recover. The fiscal year 2018 *Financial Report* did not reflect any liabilities for additional disaster relief amounts that may be authorized by legislation enacted after September 30, 2018. The SBA has begun to increase its rate of administrative spending as it conducts its disaster response. This spending is consistent with SBA's experience in responding to prior disasters. The SBA could experience future variations in the performance of existing disaster and business loan portfolios as businesses in the affected areas strive to recover.

Statutory Debt Limit

As of September 30, 2018, debt subject to the statutory debt limit was $21,474.8 billion. However, per P.L. 115-56, the statutory debt limit was temporarily suspended through March 1, 2019. Effective March 2, 2019, the statutory debt limit was set at $21,987.7 billion and on March 4, 2019, the Secretary of the Treasury notified the Congress that the statutory debt limit would be reached on or after that day. When delays in raising the debt limit occur, Treasury often must deviate from its normal cash and debt management operations and take a number of what it calls "extraordinary measures" to meet the government's obligations as they come due without exceeding the debt limit. Treasury began taking these extraordinary actions on March 4, 2019.