Department of the Treasury
Internal Revenue Service

Fiscal Year 2020
Capital Investment Plan
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Note to Reviewers

The Office of Management and Budget (OMB) Capital Planning Guidance changed how certain IT Investments are categorized. The Agency IT portfolio summary consists of Part 1: IT Investments for Mission Delivery; Part 2: IT investment for Administrative Services and Support Systems, and Part 3: IT Investments for IT infrastructure, IT Security, and IT Management (so called “standard investments”). The guidance no longer requires Part 3 investments to be reported as major or non-major investments. However, the Department of the Treasury’s Capital Investment Plan will continue to report these investments.

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

- FY 2018: Actual obligations of budgetary resources including annual funding, prior year balances, user fees, and other sources;
- FY 2019: Estimated obligations based on the Annualized Continuing Resolution funding level assumed for the FY 2020 President’s Budget. Figures include annual funding, prior year balances, user fees, and other sources; and
- FY 2020: Estimated obligations based on the funding requested in the FY 2020 President’s Budget. Figures include annual funding, prior year balances, user fees, and other sources. The amount of new budget authority requested for a given investment can be found in the Summary of Capital Investments table (see “FY 2020 Budget Authority Request” column).

Treasury is committed to working with partners to further improve capital investment reporting and performance management. As a result, plan formatting may continue to evolve. Additional information about Treasury’s capital investments is available at the link below.

https://itdashboard.gov/drupal/summary/015
Major IT Investments

Account Management Services (AMS)

Description:

AMS is a major strategic investment that delivers improved customer service to over 34,000 end-users by providing the tools necessary to access tax information quickly and accurately.

Investment Obligations:(In Millions of $):

<table>
<thead>
<tr>
<th>Type</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>$ Change</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-Total DME Obligations (Including Internal labor (Govt. FTE))</td>
<td>0.15</td>
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<td>-1.47</td>
<td>-100.00%</td>
</tr>
<tr>
<td>Sub-Total O&amp;M Obligations (Including Internal Labor (Govt. FTE))</td>
<td>13.49</td>
<td>14.99</td>
<td>16.39</td>
<td>1.40</td>
<td>9.34%</td>
</tr>
<tr>
<td>Total Obligations</td>
<td>13.63</td>
<td>16.46</td>
<td>16.39</td>
<td>-0.07</td>
<td>-0.43%</td>
</tr>
</tbody>
</table>

Purpose, Accomplishments, Future Objectives:

AMS is a strategic program that delivers improved customer support for managing taxpayer accounts for over 34,000 end-users across:

- 7 Small Business Self Employed (SBSE) business units
- 4 Wage and Investment (W&I) business units
- 1 Large Business and International (LB&I) business unit
- Criminal Investigation (CI)
- Tax Exempt government entity (TEGE) by leveraging existing Internal Revenue Service (IRS) applications

AMS consolidates information from multiple IRS systems into a single user interface, allowing IRS employees the ability to access, research and update taxpayer accounts quickly. AMS provides data presentation services to display and validate changes/updates for taxpayer accounts, facilitates management actions/activities and makes case information readily available for decision making and reporting. In addition, AMS provides end users with the ability to work specific case workload, through 9 case management and referral inventories.

FY 2018 Accomplishments:

- Delivered modifications in support of legislative and filing season tax year changes.
- The AMS application servers were upgraded from Solaris to Linux and the project moved from WebSphere to JBOSS.
- Maintained investment to keep asset functioning as designed to maintained high performance record.

FY 2019 Accomplishments & Future Objectives:

- Delivered modifications in support of legislative and filing season tax year changes. Modifications to AMS for Tax Reform and Jobs Act, including Simplified 1040, were funded separately.
- Maintain investment to keep asset functioning as designed to maintain high performance record.

FY 2020 Future Objectives:

- Deliver modifications in support of legislative and filing season tax year changes.
- Upgrade AMS infrastructure, including hardware and Commercial Off The Shelf (COTS) software: Migrate AMS databases off of Solaris10 servers and upgrade Oracle to version 12c.
• Maintain investment to keep asset functioning as designed and maintain high performance record.

Affordable Care Act (ACA) Administration

Description:

The ACA investment encompasses the planning, development, and implementation of IT systems needed to support IRS' tax administration responsibilities associated with key provisions of the ACA legislation.

Investment Obligations:

<table>
<thead>
<tr>
<th>Type</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>$ Change</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-Total DME Obligations (Including Internal labor (Govt. FTE))</td>
<td>13.23</td>
<td>0.29</td>
<td>0.00</td>
<td>-0.29</td>
<td>-100.00%</td>
</tr>
<tr>
<td>Sub-Total O&amp;M Obligations (Including Internal Labor (Govt. FTE))</td>
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<td>162.51</td>
<td>178.85</td>
<td>16.34</td>
<td>10.05%</td>
</tr>
<tr>
<td>Total Obligations</td>
<td>193.64</td>
<td>162.80</td>
<td>178.85</td>
<td>16.05</td>
<td>9.86%</td>
</tr>
</tbody>
</table>

Purpose, Accomplishments, Future Objectives:

The ACA Administration investment implements many of the changes required to support IRS tax administration responsibilities associated with the key provisions of the ACA legislation. These responsibilities require work that encompasses the following:

• The planning, development, and implementation of new IT systems needed as well as updating current systems in support for the implementation of the American Health Benefit Exchanges;
• Validation of health care coverage retained by individuals and provided by employers, along with assessment of required penalties;
• Administration of a variety of industry-specific credits, fees, and taxes (including, but not limited to, branded prescription drug companies, health insurance companies, high-cost health insurance plans, taxes on medical devices and services); sharing of information across governmental entities and additions or changes to individual and business tax administration (such as new credits or payments, or changes to return processing).

Releases ACA 1.0 through 7.1, already in production, included the design and deployment of new systems, along with changes to existing IRS IT infrastructure. These releases:

• Supported new taxes, credits, and fees, such as the Small Business Health Care Tax Credit, Branded Prescription Drug Industry Fee, Excise Tax on Medical Device Manufacturers, Hospital Insurance Tax, and Insurance Provider Fee.
• Provided the technical solution to support Health Insurance Marketplace open enrollment in the fall of 2013 and thereafter on an annual basis, along with IRS pre-filing and post-filing compliance activities.
• Expanded information return processing and capabilities needed for compliance processing.

New IT systems deployed as part of ACA include the ACA Coverage Data Repository, Income and Family Size Determination, Information Sharing and Reporting, Premium Tax Credit (PTC), ACA Information Returns, ACA Verification Service, ACA Compliance Validation, and acceptance and validation of new of new ACA Information Return 1094/1095 A/B/Cs.

For FY 2018, the investment focused on completing Release 7.1. and moving into Operations & Maintenance. The objectives included:

• Expanded post-filing compliance for ACA Employer Shared Responsibility Payment, 4980H(a), which imposes a shared responsibility payment on an applicable large employer (employers with 50 or more full-time equivalent employees) that fails to offer minimum essential coverage to its full-time employees (and their dependents) if at least one full-time employee receives the premium tax credit;
• Improving data analytics supporting business reporting to identify Applicable Large Employers (ALEs) who have failed to offer coverage to full time employees.
• Developing an enterprise common service for performing data reconciliation of Information Returns to ensure consistent treatment of taxpayer compliance.
• Officially and fully transitioning into Operations and Maintenance.

For FY 2019 and for FY 2020, IRS will focus on operations and maintenance of the systems in ACA 1.0 through 7.1 in the Current Production Environment (CPE) to support Filing Seasons and Open Enrollments. This also includes CPE updates to existing non-ACA systems that support ACA.

**Customer Account Data Engine 2 (CADE 2)**

**Description:**

CADE 2 is IRS's modernized core tax processing system that leverages modern-day database technology, programming languages, and principles to determine refunds, penalty & interest, monitor compliance, and track historical information about individual taxpayer accounts. The program implements a single, data-centric solution which provides daily processing of taxpayer accounts and helped address the financial material weaknesses (FMW), which was downgraded to a financial significant deficiency in 2018. This investment is a component of the IRS Information Technology Modernization Business Plan. Additional information about the plan is available upon request and included in the FY 2020 President's Budget: https://home.treasury.gov/system/files/266/02.-IRS-FY-2020-CJ.pdf. CADE 2 is one of Treasury’s high value assets (HVAs) for its critical role in tax administration. The Office of Management and Budget defines HVAs are “those assets, systems, facilities, data, and datasets that are of particular interest to potential adversaries.” The IRS withstands approximately 1.4 bill cyber-attacks annually.

**Investment Obligations: (In Millions of $):**

<table>
<thead>
<tr>
<th>Type</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>$ Change</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-Total DME Obligations (Including Internal labor (Govt. FTE))</td>
<td>77.25</td>
<td>85.12</td>
<td>90.00</td>
<td>4.88</td>
<td>5.73%</td>
</tr>
<tr>
<td>Sub-Total O&amp;M Obligations (Including Internal labor (Govt. FTE))</td>
<td>19.76</td>
<td>19.16</td>
<td>20.51</td>
<td>1.35</td>
<td>7.02%</td>
</tr>
<tr>
<td>Total Obligations</td>
<td>97.01</td>
<td>104.28</td>
<td>110.51</td>
<td>6.22</td>
<td>5.97%</td>
</tr>
</tbody>
</table>

**Purpose, Accomplishments, Future Objectives:**

CADE 2 is the IRS’s modernized core tax processing system that leverages modern-day database technology, programming languages, and principles to determine refunds, penalty & interest, monitor compliance, and track historical information about individual taxpayer accounts. The Program will implement a single, data-centric solution which provides daily processing of taxpayer accounts and addresses financial material weaknesses (FMW) to maintain IRS's clean audit opinion. CADE 2 was chartered in 2009 to provide 21st century technology and digital services to the taxpayer and to IRS employees. The CADE 2 solution includes an authoritative database for individual taxpayer data that will transform the way the IRS approaches tax administration. In addition, CADE 2 improves the rates by which we process data by reducing the latency associated with antiquated technology. CADE 2 goals are to 1) establish one authoritative source for taxpayer data by leveraging a relational database and daily processing capability; 2) continue IT modernization efforts so business processes can be realigned to enable better taxpayer service and more timely compliance; 3) address the Unpaid Assessment FMW (The efforts of the CADE 2 program helped to enhance the IRS’s financial systems and reduce the Financial Material Weakness for individual taxpayer processing to a significant deficiency in 2018), demonstrate compliance with Federal Financial Management System Requirements, maintain a clean audit opinion; and 4) improve security and privacy posture by addressing identified weaknesses.

**FY 2018 Accomplishments:**

- Transition State 1 (TS1) and TS1.5 built and initialized the CADE 2 database in production. TS1 delivers faster refunds and notices, faster payment postings, and improved service for taxpayers. In doing so, the IRS accelerated the returns
processing cycle from weekly to daily and moved the management of individual taxpayer account data from 1960s sequential flat-files stored on magnetic tapes to state-of-the-art relational database technology. This accomplishment was the first key technological advancement of the program and was implemented by updating individual taxpayer account data daily. This leverages relational formats dictated by a data model that maintains historical values never before retained on account transactions. This allows instant viewing of taxpayer account data by IRS customer service and other representatives.

FY 2019 Accomplishments and Future Objectives:

- CADE 2 is progressing through the largest, most critical part of the program, Transition State (TS2). As of 4/2/19, the project has converted 13 percent of the code for IMF Runs 12 and 15, where the majority of tax law is implemented.

- TS2 initially had three strategic goals:
  - Reengineering the IMF by applying modernized programming languages.
  - Establishing the CADE 2 database as the Authoritative Data Source (ADS) for financial and legal purposes.
  - Addressing the Unpaid Assessment Financial Material Weakness (UA FMW) for individual taxpayer accounts

The program is now focused on reengineering the IMF core components by applying modernized programming languages, which is prioritized due to its complexity and reliance on dwindling subject matter experts.

- In FY 2018 and FY 2019 CADE 2 resources focused on reengineering the IMF’s core components through delivery of the Individual Tax Processing Engine (ITPE) project. This included the completion of development activities for the first four 10-week Product Increments (PI) PI-1 through PI-4 and the initiation of PI-4 development. Development for the Domestic Address Change and Extension to File business scenarios is complete. The program is in the final stages of refreshing the CADE 2 solution architecture, including development of a conceptual target state architecture aligned to target state capabilities.

- During FY 2019, IRS will add two new cross-functional development teams. To help onboard these new resources as effectively as possible, the program has created an ITPE Orientation Bootcamp, which will cultivate the next generation of ALC and IMF subject matter experts (SMEs) to lead IRS modernization efforts.

FY 2020 and Beyond (Future Objectives):

- The IRS IT Modernization Plan along with the companion document, sets goals for the two-phase six year IRS modernization efforts. The companion document sets goals and milestones and will be updated periodically to reflect progress and changes in milestones.

- In FY20 and beyond, IRS will complete the modernization of core tax processing through ITPE, establish CADE 2 as the authoritative data source and make that available data for multiple uses, and provide enhanced financial information to improve IRS Unpaid Assessment Financial Reporting and address the Unpaid Assessment Financial Significant Deficiency. In the target state environment, the current individual taxpayer account system core components will be retired. It is important to note that “completing CADE 2” is not synonymous with “Retiring IMF” – future capabilities will enable visibility and access to taxpayer account detail on a near real-time basis for internal and external consumers of individual taxpayer data.

**e-A3 (Authentication, Authorization, Access)**

**Description:**

e-A3 provides Secure Access to IRS Web based applications and data to protect taxpayers from identity theft and make the IRS’s applications more accessible, secure, and intuitive for customers. e-A3 is a program that combines the eAuthentication (in Production), eAuthorization (in Production & O&M), and eAccess (in conceptual phase) projects. It will manage secure access, application and data analytics.

**Investment Obligations: (In Millions of $):**

<table>
<thead>
<tr>
<th>Type</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>$ Change</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-Total DME Obligations (Including Internal labor (Govt. FTE))</td>
<td>14.40</td>
<td>33.97</td>
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<td>-21.78%</td>
</tr>
<tr>
<td>Type</td>
<td>FY 2018</td>
<td>FY 2019</td>
<td>FY 2020</td>
<td>$ Change</td>
<td>% Change</td>
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<tr>
<td>----------------------------------------------------------------------</td>
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<td>----------</td>
</tr>
<tr>
<td>Sub-Total O&amp;M Obligations (Including Internal Labor (Govt. FTE))</td>
<td>16.22</td>
<td>24.12</td>
<td>30.45</td>
<td>6.33</td>
<td>26.24%</td>
</tr>
<tr>
<td>Total Obligations</td>
<td>30.62</td>
<td>58.08</td>
<td>57.02</td>
<td>-1.06</td>
<td>-1.83%</td>
</tr>
</tbody>
</table>

**Purpose, Accomplishments, Future Objectives:**

Secure Access is the identity proofing, registration and log-in mechanism for taxpayers to access most IRS online applications and is a critical cyber defense that prevents inappropriate access to taxpayer data from those without authorization. This program helps taxpayers register for a Secure Access profile. This investment will make the log-in process more secure, user-friendly, and compliant with new federal identity and security standards. It will develop new authorization capabilities to manage permissions to access customer data and information. This effort supports secure customer access through an integrated suite of capabilities, applied consistently across channels including internet, landline, and mobile. Specific capabilities include: Enhanced ID proofing and authentication technology that will utilize internal IRS data (e.g., tax and information return data), third party trusted sources, and risk-based authentication (e.g., real-time decisions). Integration of e-Authentication (eAuth) data with data from other channels, such as phones, to perform analytics on the customer experience and fraud detection. Authorization capabilities to perform attribute-based access controls for third parties and tax professionals. e-Signature solution to provide the ability for authenticated taxpayers to electronically sign and submit returns, statements, and other documentation. Response and recovery capabilities and processes to respond to data breaches and fraud incidents. Reporting capabilities will provide the tools and infrastructure to track and manage real time business performance metrics, fraud analytics, system performance results, and application usage information.

**Accomplishments include:**

- Migrated all of the eServices applications behind eAuth to provide more secure way for the tax professional community to conduct business with the IRS on behalf of the taxpayer
- Authorization Framework moved to Production and O&M
- eAuth implemented a new Level of Assurance 2 (LOA2) workflow to meet NIST 63.2 standards, providing enhanced security to IRS transactions/data
- Conducted electronic risk assessment and dispositioned all 52 external facing applications which now protects Online Payment Agreement applications, TPP IDVerify and piloted FIS TCS
- Supported compensating controls and RAFTs for applications that are not protected by eAuth
- Addressed nearly 300 Security Findings by upgrading 244 servers.
- 100% of external facing applications have completed a Digital Identity Risk Assessment (DIRA) in accordance with NIST SP 800-63-3.

**2019 and 2020 objectives include:**

- Improve usability, fraud protection, and analytics for the existing Secure Access eAuth platform, to comply with new NIST SP 800-63-3, Digital Identity Guidelines
- Enhance eAuth Help Desk functionality, increase user coverage and user experience (e.g., adding text-to-voice for the one-time passcode token, etc.)
- Increase security based on new security threats
- Application integration of multiple identity proofing vendors supporting Secure Access registration to enhance security and increase user coverage
- Entitlement Management- continue to work enterprise level solution and design
- eSignature - continue to work enterprise level solution and design
- Integrate the Authorization Framework with the Tax Pro Account once that application is developed while continuing to work enterprise level concept and design
- Integration of Terms of Service with e-Services to eAuth Framework
- eAuth will be conducting performance tuning activities to ensure that that application can support 50% increase in capacity as measured in transactions per second (TPS) over current (2018) baseline
- IRS will establish/enhance the Secure Access ecosystem that provides unified, seamless and more secure taxpayer experience in accordance with NIST SP800-63-3.
e-Services

Description:
e-Services is a suite of web-based, self-assisted services that allow authorized individuals to do business with the IRS electronically. e-Services products are currently available to tax practitioners, registered agents and other third parties. The services include:

- External System of Access Management (ESAM) used to store, update, and monitor all IRS e-file, TIN Matching, ACA, IVES and State Application information
- Taxpayer Identification Number (TIN) Matching that allows backup withholding payers to determine if a taxpayer’s name control (NC) and TIN number match with IRS records before filing information return tax documents (e.g., 1099 tax documents) with the IRS
- TIN Validation Enterprise Service (TINV ECS) comparing the taxpayer identification number (TIN) and name control (the first four characters of a surname or first four characters of the first significant word in a non-individual’s title) against certain IRS or SSA files
- Return Preparer Identity Validation Service (RPR-IVS) to provide authentication/prooﬁng as requested by Return Preparer Oﬃce for return preparers within the Direct Pay pipeline
- Transcript Delivery System (TDS) allows an authorized third party (including state and federal agencies and Reporting Agents) to request transcript information (e.g., tax return transcripts, tax account transcripts, a record of account) for individual and business taxpayers on line.
- Automated Electronic Fingerprinting (AEF) allows the IRS to submit scanned fingerprints of e-File Provider applicants to the Integrated Automated Fingerprint Identiﬁcation System (IAFIS) managed by the Federal Bureau of Investigation (FBI), to determine whether these applicants have committed criminal offenses. (internal IRS employees only).

Investment Obligations: (In Millions of $):

<table>
<thead>
<tr>
<th>Type</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>$ Change</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-Total DME Obligations (Including Internal labor (Govt. FTE))</td>
<td>1.94</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>-100.00%</td>
</tr>
<tr>
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<td>9.38</td>
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<td>0.67</td>
<td>6.84%</td>
</tr>
<tr>
<td>Total Obligations</td>
<td>11.32</td>
<td>9.87</td>
<td>10.54</td>
<td>0.67</td>
<td>6.80%</td>
</tr>
</tbody>
</table>

Purpose, Accomplishments, Future Objectives:

E-Services is a suite of web-based, self-assisted services that consist of two parallel multi-tiered access portals, one for registered third-party users and one for IRS employees. As part of Organization and Business Systems Modernization programs, the Internal Revenue Service has reinforced the importance of leveraging the indirect channel of third-party relationships to meet its strategic goals of service to all taxpayers, and productivity.

FY 218 Accomplishments:

- Delivered modiﬁcations in support of legislative and ﬁling season tax year changes.
- Addressed TIGTA recommendations for continuous monitoring and duplicate identiﬁcation of ﬁngerprints while not impacting the Electronic Return Originators (ERO’s) current ﬁngerprinting process for Automated Electronic Fingerprinting (AEF).
- Delivered of External Customer Data Store (ECDS)Resiliency to support Modernized eFile (MeF) during File Season.
- Delivered Return Preparer Identity Validation Service (RPR-IVS) resilience in conjunction with Direct Pay.
- Upgraded eServices infrastructure, including hardware and Commercial Off The Shelf (COTS) product software upgrades to adhere to the N-1 enterprise standard.

Future Objectives:

- FY 2019
  - Deliver FY 2019 Operations and Maintenance changes for eServices.
• Deliver Transcript Delivery System (TDS) Late Legislative and Wage and Income 2019 Updates.

FY 2020 Goals:
• Upgrade eservices infrastructure, including hardware and Commercial Off The Shelf (COTS) product software upgrades to adhere to the N-1 enterprise standard.
• Deliver Bot/Shape through the implementation of Application Programmers Interface (API).
• Deliver modifications in support of legislative and filing season tax year changes.

Enterprise Case Management (ECM)

Description:
ECM provides an enterprise solution for performing case management functions using a COTS platform and common services to improve customer service, automate manual processes, increase efficiencies and simplify case management systems operations. This investment is critical to the IRS providing a "360 view" view of taxpayer interactions and IRS services that is critical to delivering comprehensive customer service to taxpayers. As such, this investment is a component of the IRS Information Technology Modernization Business Plan. Additional information about the plan is available upon request.

Investment Obligations: (In Millions of $):

<table>
<thead>
<tr>
<th>Type</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>$ Change</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-Total DME Obligations (Including Internal labor (Govt. FTE))</td>
<td>34.16</td>
<td>60.00</td>
<td>45.00</td>
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<td>-25.00%</td>
</tr>
<tr>
<td>Sub-Total O&amp;M Obligations (Including Internal labor (Govt. FTE))</td>
<td>0.00</td>
<td>0.01</td>
<td>0.02</td>
<td>0.00</td>
<td>5.73%</td>
</tr>
<tr>
<td>Total Obligations</td>
<td>34.16</td>
<td>60.01</td>
<td>45.02</td>
<td>-15.00</td>
<td>-24.99%</td>
</tr>
</tbody>
</table>

Purpose, Accomplishments, Future Objectives:
Enterprise Case Management (ECM) provides an enterprise solution for performing case management functions using a COTS platform and common services to improve customer service, automate manual processes, increase efficiencies and simplify case management systems operations. ECM will implement a COTS solution to improve case creation, management, closure, and reporting. ECM will help drive modernization efforts across the IRS, leading to increased business and IT efficiencies and improved customer service while eventually enabling the retirement of legacy case management systems.

After the ECM Program discovered significant technical limitations with the previous COTS product being used for case management at the IRS, the program defined and launched a product assessment and acquisition strategy to identify and evaluate products/solutions to meet IRS business and technical needs. These products/solutions must be scalable to serve as the foundation for an enterprise case management platform.

The strategy includes:

• Information exchanges with other agencies to learn about their experiences in implementing enterprise case management
• Information exchanges with industry via requests for information (RFIs)
• RFI vendor demonstrations to learn about capabilities and features available in the case management marketplace
• Analysis of applicable audit findings and recommendations across multiple agencies
• A draft and final request for quotations (RFQ) informed by the above information

The IRS published the final RFQ in May 2018, evaluated responses over the summer, and issued awards to begin execution of the ECM Physical Assessment and Analysis (EPAA) with two selected vendors in November 2018. The EPAA includes challenge-based scenarios completed by vendors over several months to ensure that their products can meet all mandatory minimum requirements and function well in the IRS IT environment. An award for one or more products for an ECM solution is expected in FY 2019.
FY 2019: The IRS started work on the ECM First Release in October 2018 and is performing activities that can be worked concurrently with product assessment and selection. Current plans expect to procure ECM solution in FY 2019. For 2020, the investment anticipated delivering initial case management capabilities but that effort is being re-planned.

**Foreign Account Tax Compliance Act (FATCA)**

**Description:**

FATCA requires foreign financial institutions to report to the IRS information about financial accounts held by U.S. taxpayers, or foreign entities in which U.S. taxpayers hold a substantial ownership interest. This investment is essential to the IRS fulfilling its international commitments and to the IRS fully utilizing the information directed by Congress to promote compliance for U.S. taxpayers using foreign accounts.

**Investment Obligations: (In Millions of $):**

<table>
<thead>
<tr>
<th>Type</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Sub-Total DME Obligations (Including Internal labor (Govt. FTE))</td>
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<td>35.41</td>
<td>1.81</td>
<td>5.40%</td>
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<tr>
<td>Total Obligations</td>
<td>51.83</td>
<td>43.88</td>
<td>45.69</td>
<td>1.80</td>
<td>4.11%</td>
</tr>
</tbody>
</table>

**Purpose, Accomplishments, Future Objectives:**

The purpose and goal of FATCA is to promote disclosure of foreign accounts held by U.S. taxpayers and to integrate this information into current IRS compliance activities. FATCA introduces new reporting requirements for U.S. taxpayers and Foreign Financial Institutions (FFIs). The legislation requires U.S. taxpayers holding foreign financial assets, with aggregate values exceeding certain thresholds, to annually report information to the IRS; and for FFIs with U.S. taxpayer accounts to register, report annually to the IRS, and withhold / pay 30 percent of selected U.S. source income to the IRS. These complementary provisions create a web of international tax accountability, allowing the IRS to gather and analyze information from multiple sources, bolstering the compliance of U.S. taxpayers with assets overseas.

Treasury has worked with foreign governments to negotiate Intergovernmental Agreements (IGAs) that address specific legal impediments surrounding privacy laws and the disclosure of account holder information. In addition to foreign account and asset data submitted by taxpayers and entities, the IRS will assemble and transmit Bank Deposit and Interest (BDI) data on accounts held by foreign nationals from U.S. financial institutions (FFIs) to foreign government Host Country Tax Authorities (HCTAs), under agreements intended to facilitate FATCA adoption.

The FATCA investment encompasses planning, development, and implementation of key IT systems needed to support IRS tax administration response to FATCA provisions. Work is organized into Releases that deploy functionality to meet key legislative dates. Release details are explained in further detail below.

Major application components of the FATCA Program are:

- Financial Institution (FI) Registration
- International Data Exchange Service (IDES)
- International Compliance Management Model (ICMM)
- Withholding and Refund (W&R) and Qualified Intermediary (QI) Application.

Accomplishments:

- In FY 2018, IRS implemented legislative requirements that allowed for maintenance of the QI, FI, and ICMM releases, as well as creation of reciprocal reports, submitted QI periodic certifications and pre-existing FI certifications, and resolved outstanding issues. The IRS has delivered all legislative mandated functionality ahead of schedule and under budget that was approved under FATCA governance.
- Deployed state-of-the-art FATCA Registration solution for Financial Institutions (FFIs) worldwide, establishing a streamlined environment to register, ensuring data security; 318,464 FFIs have registered as of August 15, 2018
• Developed Global Intermediary Information Number (GIIN), issued to FIs that register with the IRS that allows the U.S. and IGA partners to identify FIs with associated filing data
• Deployed an electronically searchable/downloadable FI List
• Developed uniform standards for data collection/transmission from FIs via the FATCA XML schema, with cooperation of foreign governments; information sharing pursuant to IGAs will takes place in accordance with these standards
• Released new FATCA forms and deployed a global platform, International Data Exchange Service (IDES); successfully enabling reporting and electronic information exchange
• Launched ICMM to receive, process, store, and manage FATCA data received from various sources, making it available for future compliance activities
• Implemented significant communication/outreach activities to streamline processes and provide FATCA guidance (e.g., issues escalated from IRS.gov, eHelp Desk, and Comments Application)
• Established IGAs with over 100 governments worldwide, on behalf of The Department of Treasury
• Implemented Reciprocal Data Exchanges to include Form 1042S-Withholding Agent changes; application submission, QI Agreements; and Renewal of FI Agreements.
• FATCA moved to normal operation in October of 2018. Due to the maturity of FATCA business capabilities and IT systems that support them, IRS Senior Executive Team determined there was no longer a need to manage FATCA functionality within the construct of a Program Management Office (PMO). As such, the Enterprise IT PMO (EPMO) effectively closed out the FATCA PMO in coordination with the receiving organizations (AD) in a seamless transition to normal operations in October of 2018.

Future Objectives:

• Long-term goals for FATCA will be achieved through the FATCA Program Release Plan, which outlines a prioritized approach to: address required legislative mandates, deliver new/enhanced business capabilities, reduce/mitigate risks, evaluate deficiencies in current system capabilities, reduce manual workarounds for the Business and IT, improve FATCA compliance practices, and establish IT capabilities that can support other IRS initiatives.

Individual Master File (IMF)

Description:

IMF is the authoritative data source for individual tax account data. All other IRS information system applications that process IMF data depend on output from this source. IMF is a critical component of IRS' ability to process tax returns. IMF is one of Treasury's HVAs for its critical role in tax administration. The Office of Management and Budget defines HVAs as “those assets, systems, facilities, data, and datasets that are of particular interest to potential adversaries.” The IRS withstands approximately 1.4 bill cyber-attacks annually.

Investment Obligations: (In Millions of $):

<table>
<thead>
<tr>
<th>Type</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>$ Change</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-Total DME Obligations (Including Internal labor (Govt. FTE))</td>
<td>5.09</td>
<td>3.60</td>
<td>0.00</td>
<td>-3.60</td>
<td>-100.00%</td>
</tr>
<tr>
<td>Sub-Total O&amp;M Obligations (Including Internal labor (Govt. FTE))</td>
<td>14.24</td>
<td>15.53</td>
<td>18.60</td>
<td>3.07</td>
<td>19.77%</td>
</tr>
<tr>
<td>Total Obligations</td>
<td>19.33</td>
<td>19.13</td>
<td>18.60</td>
<td>-0.53</td>
<td>-2.77%</td>
</tr>
</tbody>
</table>

Purpose, Accomplishments, Future Objectives:

IRS is responsible for collecting revenue from individuals to fund the operations of the federal government. In order to effectively accomplish this goal, it must maintain authoritative data on individual taxpayers. The IMF is the authoritative data
store for individual taxpayers accounts. Within the IMF, accounts are updated, taxes are assessed, and refunds are generated as required each tax filing period. Virtually all IRS information system applications and processes depend on output, directly or indirectly, from this data source.

Currently, the IMF continues to fill the functional needs of the individual taxpayer account processing and to perform Operations & Maintenance for tax law changes. Future endeavors include an organizational decision to translate key IMF runs from Assembly Language Coding (ALC) to JAVA leveraging a modernized language and adopt new development techniques that will enable rapid response, and delivery, to customer requests. This is being initiated in the CADE 2 Individual Tax Processing Engine (ITPE) project. The IMF project team is engaged in discussions with ITPE and CADE 2 on modernizing IMF code. The IMF team will continue interacting with programs that impact IMF and continue performing Operations & Maintenance for tax law and maintenance changes.

**Integrated Customer Communication Environment (ICCE)**

**Description:**

ICCE provides problem-solving information through software and connections to legacy databases for both the phone and web. These applications use voice response, Internet, and other computer technology to provide service to taxpayers 24 hours a day.

**Investment Obligations: (In Millions of $):**

<table>
<thead>
<tr>
<th>Type</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>$ Change</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-Total DME Obligations (Including Internal labor (Govt. FTE))</td>
<td>0.00</td>
<td>0.04</td>
<td>0.00</td>
<td>-0.04</td>
<td>-100.00%</td>
</tr>
<tr>
<td>Sub-Total O&amp;M Obligations (Including Internal Labor (Govt. FTE))</td>
<td>10.59</td>
<td>11.65</td>
<td>11.78</td>
<td>0.13</td>
<td>1.16%</td>
</tr>
<tr>
<td>Total Obligations</td>
<td>10.59</td>
<td>11.69</td>
<td>11.78</td>
<td>0.09</td>
<td>0.81%</td>
</tr>
</tbody>
</table>

**Purpose, Accomplishments, Future Objectives:**

ICCE directly supports the IRS Strategic Goal of enabling all taxpayers to meet their tax obligations while protecting the integrity of tax system.

- **Get Transcript** is a web-based application that allows authenticated taxpayers to securely view copies of their account.
- **Order a Transcript** is a web-based application that allows taxpayers to order transcripts on line and have them mailed to their address of record.
- **Online Payment Agreement Application** allows the taxpayer or Power of Attorney and qualified businesses to apply for and receive on-line approval for a short-term extension to pay or set up a monthly installment agreement.
- **Identity Protection PIN (IPPIN)** is a web-based application designed to provide a pin to taxpayers that are victims of identity theft. This pin will be used by taxpayers to file their tax return and prevent fraudulent tax return filing.
- **Internet Refund Fact of Filing (IRFOF) - Where's My Refund application** - provides tax refund status information via the web to 1040 series filers.
- **IRS2Go Mobile Applications** is designed to be used via smart phone technology.
- **Where's My Amended Return (WMAR)** allows taxpayers to check the status of their amended returns via web or smart phone.
- **Internet Refund Trace** allows taxpayers who have not received paper refunds after a specific amount of time to initiate a refund trace.
- The **Modernized Internet Employer Identification Number Application** allows the general public to apply for an Employer ID number (EIN) over the web and receive the number in the same session.
• ICCE provides a set of telephone applications allowing individual taxpayers to interact directly with their accounts.

• ICCE Online Services (OLS) WEB Services & Mobile Applications - This suite of products is designed to be used via smart phone technology, applications include (Foreign Account Tax Compliance Act Foreign Financial Institution (FATCA FFI) Look-up Tool, Offer in Compromise (OIC) Calculator, Return Preparer Look-Up Tool, IRS2Go, Volunteer Income Tax Assistance (VITA) and Search).

• The ICCE FIS Tax Check Application, required by EO 13476, will conduct an automated tax compliance look up and disclose limited tax return information in a standard response to 23 federal investigative agencies.

• WCMS www.irs.gov is the IRS’s digital face to the world, providing the primary access to tax guidance, tax services, and information sharing.

FY 2018 Accomplishments:
• Added chat capabilities to Online Payment Agreement (OPA), moving OPA behind eAuthentication at LOA2, updating IRS2Go version 5.4.

• Upgraded to IBM WebSphere MQSeries, V8 on IRS distributed platforms (Solaris, Linux, Windows), including the 508 recertification to several ICCE web applications.

• Added more Prefixes to Modernized Internet EIN.

• Increased reporting on tax collection for business entities to the Private Debt Collection Data Transfer Component (PDTC).

• Integrated seven additional states to allow taxpayers to voluntarily obtain their IPPIN to further protect their identities while filing their tax returns.

• Enhanced the call routing processing to allow taxpayers to be directed to more specific customer service representatives to handle their tax issues.

• Enhanced security capabilities by adding BOT and Shape software to monitors all ICCE web applications.

• Maintained all backend processing operability in conjunction with IDRS command code changes.

• Continued maintenance to all telephone, web, cloud and mobile applications as requested by our business partners throughout the agency.

FY 2019 Objectives
• more enhanced reporting on callers dialing into the telephone system, staying 508 compliant, continuing to modify our web applications to comply with the latest security technologies, such as updating the Java frameworks from Struts to Spring MVC, keeping our Java software up to date, and migrating our system to the JBoss/Linux platforms.

• Resolve IRS2Go security findings and other Online Service backlog request.

• ICCE will be further securing the Refund API to tighten up vulnerabilities for the taxpayer.

FY 2020 Objectives
• Develop more compensating controls around web applications to enhance security

• Allow all taxpayers nationwide to obtain IPPINs voluntarily.

• Continual maintenance of all telephone, web, cloud and mobile applications as requested by our business partners throughout the agency.

• FY20 O&M for ICCE (WEB)

• FY20 O&M for ICCE (Phone)

• FY20 O&M for ICCE Refund (Web)
- FY20 O&M for ICCE Refund (Phone).
- Move more OCCE apps behind eAuth.

**Integrated Data Retrieval System (IDRS)**

**Description:**

Since 1973, IDRS has been a mission-critical system. Used by 60,000 IRS employees, IDRS: provides systemic case review, provides consistency of case control, streamlines employee activities thereby reducing staffing needs, issues notices and letters to taxpayers, allows taxpayers to see status of refunds

IDRS is one of Treasury’s high value assets (HVAs) for its critical role in tax administration. The Office of Management and Budget defines HVAs are “those assets, systems, facilities, data, and datasets that are of particular interest to potential adversaries.” The IRS withstands approximately 1.4 bill cyber-attacks annually.

**Investment Obligations: (In Millions of $):**

<table>
<thead>
<tr>
<th>Type</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>$ Change</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-Total DME Obligations (Including Internal labor (Govt. FTE))</td>
<td>1.17</td>
<td>0.18</td>
<td>0.16</td>
<td>-0.02</td>
<td>-11.38%</td>
</tr>
<tr>
<td>Sub-Total O&amp;M Obligations (Including Internal labor (Govt. FTE))</td>
<td>14.55</td>
<td>16.60</td>
<td>16.63</td>
<td>0.03</td>
<td>0.18%</td>
</tr>
<tr>
<td>Total Obligations</td>
<td>15.72</td>
<td>16.78</td>
<td>16.79</td>
<td>0.01</td>
<td>0.05%</td>
</tr>
</tbody>
</table>

**Purpose, Accomplishments, Future Objectives:**

Operational since 1973, IDRS is a secure, reliable, flexible and mission-critical system consisting of databases and programs supporting IRS employees who are working active tax cases.

- IDRS manages data retrieved from the Tax Master Files allowing over 60,000 IRS employees who use it daily to take actions on specific taxpayer account issues, track status and post updates back to the Master Files.
- IDRS provides for systemic review of case status, reducing staffing needs and providing consistency in case control. For example, each time a taxpayer phones IRS, the representative answering the phone uses IDRS to log the call and answer any questions.
- Actions taken via IDRS include but are not limited to:
  - notice issuance
  - taxpayer correspondence
  - installment agreement processing
  - offers in compromise
  - adjustment processing
  - penalty and interest computations and explanations
  - credit and debit transfers among accounts
  - research of taxpayer accounts for problem resolution of taxpayer inquiries
- Using data analytics, IDRS enables IRS to efficiently evaluate taxpayer data to inform enforcement and secure legal compliance, both domestically and internationally.
- IRS internet applications access IDRS to provide services, information and assistance to taxpayers. For example:
  - Annually, over four million business taxpayers obtain Employer Identification Numbers (EINs) through www.irs.gov instead of paper correspondence.
- IDRS enables businesses providing payroll services to submit tax data on behalf of millions of taxpayers and collaborates with registered tax practitioners to reduce the burden of filing Powers of Attorney and Taxpayer Information Authorizations, allowing them to request access to other E-Services.

A variety of tax information is produced by IDRS that facilitates collaboration with various internal and external partners including:
IDRS is continuously monitored for cost, schedule, and project performance. IDRS serves the taxpayers in many ways and helps address various performance gaps. IDRS’ taxpayer-centered services promote intangible goodwill to citizen's perception of IRS and the Federal Government as well as ensuring consistent, efficient service.

**Future development efforts are limited primarily to:**

- Legislatively mandated tax law changes
- Implement customer-approved work requests that enable IRS employees and systems that depend on IDRS, to ensure compliance with current tax law while providing quick and accurate service to taxpayers

**Accomplishments include:**

- Implemented TCJA Tax Reform legislation
- Implemented Form 1040 reduction changes and accompanying schedules, and elimination of forms 1040A and 1040EZ
- TY2017 PATH Act legislation
- Implemented components of the Private Debt Collection legislation
- Implemented components of the Bipartisan Budget Act of 2015 Programming Updates

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### Integrated Financial System/CORE Financial System (IFS)

#### Description:

IFS is the IRS's core financial system used for budget, payroll, accounts payable/receivable, general ledger functions and financial reporting. IRS uses IFS to report on the cost of operations and manage budgets by fiscal year.

#### Investment Obligations: (In Millions of $):

<table>
<thead>
<tr>
<th>Type</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>$ Change</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-Total DME Obligations (Including Internal labor (Govt. FTE))</td>
<td>3.38</td>
<td>0.78</td>
<td>0.78</td>
<td>0.00</td>
<td>0.00%</td>
</tr>
<tr>
<td>Sub-Total O&amp;M Obligations (Including Internal Labor (Govt. FTE))</td>
<td>16.58</td>
<td>10.25</td>
<td>10.39</td>
<td>0.14</td>
<td>1.37%</td>
</tr>
<tr>
<td>Total Obligations</td>
<td>19.95</td>
<td>11.03</td>
<td>11.17</td>
<td>0.14</td>
<td>1.27%</td>
</tr>
</tbody>
</table>

#### Purpose, Accomplishments, Future Objectives:

- Integrated Financial System (IFS) is the core financial system for IRS. By leveraging a Federal version of SAP COTS software. The system provides a reliable, standardized and auditable platform for administrative accounting, budget formulation/labor forecasting and execution (funds management) of the IRS annual budget. Other financial functions include:
  - General ledger, managerial cost accounting, accounts payable, accounts receivable, purchase card transaction processing and payments, asset accounting, all financial reporting, and budgetary and management reporting.
  - In addition, it provides functionality supporting the management and administration of the federal acquisition/procurement processes.
- The IFS system provides the ability to accountants, budget, and financial management analysts to effectively manage U.S. Government finances for the Internal Revenue Service and respond to audit requests in support of a clean audit opinion.
- IFS allows the IRS to pay its bills on time while meeting Federal financial regulatory requirements.
2018 Accomplishments:

- IFS implemented the following major changes:
  - Enabled Procurement for Public Sector (PPS) module of the SAP COTS product that replaced the legacy procurement system, Integrated Procurement System (IPS)
  - Completed federally mandated changes to comply with the DATA Act (Digital Accountability and Transparency Act)
  - Enable additional asset categories in the SAP Asset Module (SM)

FY 2019:

- The SAP ERP Central Component (ECC) component will migrate from the SOLARIS platform to LINUX.
- The database will be upgraded to Oracle version 12.
- The ECC component will also be upgraded to the latest Enhancement Patch (EP8) level.
- IFS will complete standard maintenance patches, year-end close, and support the GAO audit responding to audit findings (if any).

FY 2020:

- IFS will complete standard maintenance patches, year-end close, and address any GAO findings.

IFS will also make changes as necessary to support ongoing Federal Financial System mandates. IFS is a Federal version of SAP COTS software which includes Procurement for Public Sector (PPS).

**Integrated Production Model (IPM)**

**Description:**

IPM is a consolidated source of core taxpayer data and other specific data to be used by a wide range of business applications that support case identification, selection, prioritization, delivery and reporting.

**Investment Obligations: (In Millions of $):**

<table>
<thead>
<tr>
<th>Type</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>$ Change</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-Total DME Obligations (Including Internal labor (Govt. FTE))</td>
<td>16.05</td>
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<td>1.11</td>
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<td>Sub-Total O&amp;M Obligations (Including Internal Labor (Govt. FTE))</td>
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<td>8.88</td>
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<td>5.92</td>
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</tr>
<tr>
<td>Total Obligations</td>
<td>27.76</td>
<td>10.52</td>
<td>15.91</td>
<td>5.39</td>
<td>51.21%</td>
</tr>
</tbody>
</table>

**Purpose, Accomplishments, Future Objectives:**

IPM is a data integration technology on the IRS infrastructure. The system provides a centralized, consolidated source for all core taxpayer data, as well as ancillary and related data. Designed to be available for use by a wide variety of downstream projects and programs. Application includes Business Research, Compliance activities, as well as applications that support case identification, selection, prioritization, delivery and reporting.

Recent accomplishments include significant process improvement activities to acquire, load, and certify taxpayer data from legacy sources by rewriting ALC extracts using Java, expanded operational and structural metadata collection and datamart reporting to improve workload balancing and management, simplified ETL and ELT workstreams to improve efficiency faster client turn-around, and hybrid datamart creation to improve query performance and maximize customer satisfaction.
Integrated Submission and Remittance Processing System (ISRP)

Description:

ISRP is the legacy frontline tax processing system that processes paper tax returns from individuals and businesses. It also updates tax forms to comply with tax law changes.

Investment Obligations: (In Millions of $):

<table>
<thead>
<tr>
<th>Type</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>S Change</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-Total DME Obligations (Including Internal labor (Govt. FTE))</td>
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<tr>
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<td>11.67</td>
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<td>2.41%</td>
</tr>
<tr>
<td>Total Obligations</td>
<td>13.32</td>
<td>11.49</td>
<td>11.67</td>
<td>0.18</td>
<td>1.55%</td>
</tr>
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</table>

Purpose, Accomplishments, Future Objectives:

The Integrated Submission and Remittance Processing (ISRP) system is an integrated suite of hardware, software and network components that provides the interfaces for data entry perfection and transmission of data to IRS Corporate data storage. ISRP Data Entry Operators enter the information from various paper documents, which are then converted into electronic data used by downstream operations such as Financial Information Systems. ISRP also updates tax forms to comply with legislative changes in tax laws. There is a system dependence on various IRS applications such as Generalized Mainline Framework (GMF), Enhanced Entity Index File (EEIF), Integrated Data Retrieval System (IDRS), and Enterprise File Transfer Utility (EFTU).

Accomplishments and Future Objectives:

- **FY 2019:**
  - Deliver legislatively mandated Tax Reform Changes to keep ISRP up-to-date.
  - Deliver updates to the ISRP system for The Protecting Americans from Tax Hikes Act (PATH Act).
  - Continue to send Foreign Account Tax Compliance Act (FATCA) information (Forms 8938, 8966 and 1042-S (Recipient Copy) to the International Compliance Management Model (ICMM) system.
  - Migrate of the ISRP Program Requirements Package (PRP) documents currently in Microsoft Word format to the Rational Requirements Composer (RRC) system.
  - Complete the deployment of the upgrade to the Intrust Version 11 that supports server event log management.
  - Deploy security patches, maintenance and firmware updates.
  - Submission Processing Consolidation: Continue supporting work required to prepare Ogden and Kansas City sites to process both Individual Master File (IMF) and Business Master File (BMF) taxpayer submissions.
  - The refresh of ISRP server infrastructure is planned.
  - Continue to support both Individual Master File (IMF) and Business Master File (BMF).

- **FY 2020:**
  - Deliver legislatively mandated Tax Reform Changes to keep ISRP up-to-date.
  - Consider proposals and options to leverage functionality between the ISRP and Service Center Recognition/Image Processing System (SCRIPS) systems to improve efficiency and continue to reduce costs.
  - Continue migration of the ISRP Program Requirements Package (PRP) documents currently in Microsoft Word format to the Rational Requirements Composer (RRC) system.
  - The refresh of ISRP server infrastructure is planned.
End User Systems and Services (EUSS)

Description:

The EUSS standard investment provides user-centered information technology (IT) products and services for 80,000 IRS employees at headquarters and field offices (including international locations). The EUSS investment funds the provisioning of end user hardware and software as well as the day-to-day operations, maintenance, services and support of all end user technologies at the IRS. As such, this investment is essential to the IRS providing reliable, quality services to millions of taxpayers every year.

Investment Obligations: (In Millions of $):

<table>
<thead>
<tr>
<th>Type</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>$ Change</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-Total DME Obligations (Including Internal labor (Govt. FTE))</td>
<td>35.51</td>
<td>40.55</td>
<td>40.53</td>
<td>-0.02</td>
<td>-0.06%</td>
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<tr>
<td>Sub-Total O&amp;M Obligations (Including Internal Labor (Govt. FTE))</td>
<td>222.78</td>
<td>203.91</td>
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</tr>
<tr>
<td>Total Obligations</td>
<td>258.29</td>
<td>244.46</td>
<td>235.94</td>
<td>-8.52</td>
<td>-3.48%</td>
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Purpose, Accomplishments, Future Objectives:

The EUSS Investment provides user-centered information technology (IT) products and services for 80,000 IRS employees at headquarters and field offices (including international locations). The EUSS investment includes annual funding for the provisioning of end user hardware and software as well as the day-to-day operations, maintenance, services and support of all end user technologies at the IRS. The EUSS investment goal is to provide a reliable, secure, innovative and cost-effective computer hardware, software, and services that enable communication, collaboration and business capabilities in support of the IRS' Tax Administration mission. Specifically, the EUSS investment ensures that IRS maintains a secure, stable and innovative workplace computing environment by providing employees with state-of-the-industry computing devices, applications, security defenses, business tools and associated end user support services to maximize uptime and productivity.

The Strategic Objectives of the investment are:

- Customer Service – providing exemplary capabilities and service, enabling the best user experience
- Workforce Excellence (People) – maintaining a satisfied, engaged and well-trained workforce equipped to provide outstanding service
- Operational Excellence (Process) – delivering higher service levels, on-time program delivery, lower costs and capacity gains achieved by efficient and effective business plan execution
- Innovation and Business Value (Technology) – providing increased business value, expanded capabilities, increased operational and resource capacity able to support changing business priorities.

The impact of the investment is the facilitation of the IRS’ future state vision and managing the end user environment by delivering innovative workplace computing technology and enhancing the customer experience; driving a transformative culture of self-service through productivity enhancing tools and pro-active education and services.

Accomplishments and Future Objectives:

- Accomplishments:
  - Furnished current industry compatible IT hardware/software including laptops, desktops, peripherals, and their associated system, security & productivity software
  - Continued Smart-IT Transformation and Customer Callback initiatives aim to improve the efficiency and effectiveness of every customer interaction in a customer-centric service culture; advance skillsets, promote workforce engagement and drive service delivery as a capability of the IRS Information Technology Modernization Business Plan.
- Continued interim measures for electronic data preservation of user created data on workstation hard drives until National Archives and Records Administration (NARA) 2019 requirements for e-records retention & eDiscovery are implemented
- Continued technology demonstration of light flexible PC-on-a-Stick technologies (e.g., Windows 10 ToGo) and virtualization across multiple end-user device platforms
- Initiated transition to a Manage Print Services (MPS) contract providing end-to-end managed services and support for network printers and multi-function devices enterprise wide; MPS will update all devices & deliver enhanced user functionality with cost savings

**Future Objectives:**
- Complete migration of enterprise workstations to MS Windows 10 OS in advance of Windows 7 EOL support on 1/14/2020
- Significantly reduce the % of aged infrastructure/equipment in use via coordinate/funded replacement initiatives
- Implement new approaches to furnish IT hardware/software including laptops, desktops, peripherals and their associated system, security & productivity software leveraging end-to-end services & commodity supply stream capabilities available in the marketplace
- Explore digital technology such as robotic process analytics & natural language processing to increase automation, self-service and improve customer experience with reduced downtime & increased efficiency by decreasing human error.
- Institutionalize Smart-IT Transformation and guiding principles to increase skillset of the workforce, improve process effectiveness & proficiency, reduce user downtime and increase self-service & automation as a way of doing business
- Continue to develop virtualization & cloud-based solutions to add data security, reduce desktop/laptop costs & support requirements
- Implement Asset Inventory Automation to automate asset inventory workflow processes with barcode scanning and Radio Frequency Identification technologies to reduce manual tasks
- Continue to evolve the Workplace Computing Strategy to support collaboration, mobile workforce & business innovation.

### Main Frames and Servers Services and Support (MSSS)

**Description:**

Provides for the development and deployment of server, middleware and large systems and enterprise storage infrastructures, including systems software products, databases and operating systems for these platforms.

**Investment Obligations: (In Millions of $):**

<table>
<thead>
<tr>
<th>Type</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>$ Change</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-Total DME Obligations (Including Internal labor (Govt. FTE))</td>
<td>42.19</td>
<td>40.23</td>
<td>6.66</td>
<td>-33.57</td>
<td>-83.45%</td>
</tr>
<tr>
<td>Sub-Total O&amp;M Obligations (Including Internal labor (Govt. FTE))</td>
<td>575.20</td>
<td>546.89</td>
<td>623.63</td>
<td>76.74</td>
<td>14.03%</td>
</tr>
<tr>
<td>Total Obligations</td>
<td>617.39</td>
<td>587.12</td>
<td>630.29</td>
<td>43.17</td>
<td>7.35%</td>
</tr>
</tbody>
</table>

**Purpose, Accomplishments, Future Objectives:**

The Mainframe and Servers, Services and Support (MSSS) investment represents the operational investment for the deployment of server, middleware and large systems as well as enterprise storage infrastructure, including systems software products, databases and operating systems for these platforms. MSSS resources are primarily used to support the operations & maintenance of the vast array of infrastructure necessary to support tax administration. MSSS represents roughly 25% of the IRS’s total IT budget. The primary objective is to ensure the 24x7 IT operations and support for all Tier 1 (Enterprise Servers) and Tier 2 (Servers, Middleware, Storage, Databases) production systems responsible for the daily operations of IRS batch and online processing. In addition, all the supporting environments that make up the applications development and deployment pipeline must be maintained, patched, secured and available for well over 400 processing applications. The MSSS Investment Provides 24x7 IT Operations and Maintenance to all IRS infrastructure that supports the vast tax processing systems. This ensures timely
MSSS TIER I Infrastructure costs supports submission processing and the upgrading of Enterprise mainframes to handle over 10,000 Millions of Instructions Per Second (MIPS) that increases capacity to handle the peak transactions. MSSS TIER II Infrastructure costs also supports submission processing and critical IRS processes such as: collections, criminal investigations, processing individual tax returns and, processing paper and electronic taxpayer payments. The MSSS non-tier specific costs supports critical IRS processes and the infrastructure such as storage costs, monitoring, and a Windows 8 upgrade.

MSSS resources ensure all infrastructure related to supporting filing season and submission processing is available for the tax customer. In addition, the IRS has the processing capabilities at its two computing centers located in Memphis, TN and Martinsburg, WVA available in the event there is a need to failover to Alternate Site Processing (ASP) and/or Disaster Recovery (DR) environments. Essentially submission processing capabilities can be sustained without interruption to the customer. The MSSS resources are applied to furthering the efficiency and effectiveness of the systems to both reduce costs and improve customer service. The Mainframes and Servers, Services and Support (MSSS) investment plans to deliver a successful filing season through the efficient management and maintenance of infrastructure operations. The MSSS investment will accomplish this by ensuring continued support for the development and deployment of servers, middleware and large systems as well as enterprise storage infrastructures, including software products, databases and operating systems for these platforms.

MSSS Initiatives:

There is increased focus on enterprise strategic goals, introduction of new technologies, increased capabilities and service models to improve overall performance and support. The WinOS Refresh will update all Wintel systems to WIN OS 2012R2, to align with enterprise strategic goals and ensure N-1 compliance while preparing for and planning upgrade to the next OS levels. The Linux Lifecycle Program will focus on support for our Applications Developers partners, to migrate existing programs to a level of SW compliance supporting the newer infrastructure. The Solaris Stabilization effort provides an interim solution to the aged Solaris hardware which has reliability and supportability issues and for which vendor support runs out in Jan 2021. The RHEL 6 to RHEL 7 initiative will address the Physical RHEL 6 Linux servers to Physical RHEL 7 Linux servers rust replacement creating a robust environment needed to support the Linux Lifecycle and Solaris Stabilization end goals. The MeF Solaris to zLinux initiative will complete the remainder of the infrastructure migration needed to finalize transition to new technology. Refreshing and enhancing the virtual environment to Synergy Gen 10, to support higher capacity needs, reduction in our physical footprint and introduction of new technology such as containerization.

There is also a focus on core submission processing refresh and rust replacement of aging servers and storage hardware for the Integrated Submission and Remittance Process system (ISRP), a filing season mission critical application. Several core IRS environments will be supported in FY19 through targeted, project specific investments. The SPIIDE Physical Server Refresh will ensure continued operability and maintenance of our CyberSecurity DLP environment. The EOPs Portal Accounts Replacement Tool investment will replace non-compliant software and reduce single point of failure for our portal account management. The Enterprise Informatica Platform will consolidate and refresh to ensure continued operability. The Business Objects Environment (BOE) will consolidate and improve enterprise reporting capabilities.

**Telecommunications Systems and Support (TSS)**

**Description:**

The Telecommunications Systems and Support (TSS) investment supports network (data and voice) services to provide secure taxpayer and employee access to IRS services. This includes the ability to provide access, phone, video, wireless and data services to 580 locations, 42,000 remote users, 80,000 employees and over 162 million taxpayer calls annually.

**Investment Obligations: (In Millions of $):**

<table>
<thead>
<tr>
<th></th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>$ Change</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-Total DME Obligations (Including Internal labor (Govt. FTE))</td>
<td>30.03</td>
<td>65.11</td>
<td>72.92</td>
<td>7.81</td>
<td>12.00%</td>
</tr>
<tr>
<td>Sub-Total O&amp;M Obligations (Including Internal labor (Govt. FTE))</td>
<td>282.25</td>
<td>263.24</td>
<td>406.30</td>
<td>143.06</td>
<td>54.35%</td>
</tr>
</tbody>
</table>
### Purpose, Accomplishments, Future Objectives:

The Telecommunications Systems and Support (TSS) investment supports network (data and voice) services to provide secure taxpayer and employee access to IRS services. This includes the ability to provide access, phone, video, wireless and data services to 580 locations, 42,000 remote users, 80,000 employees and over 162 million taxpayer calls annually. The TSS investment provides a reliable, secure, innovative and cost-effective telecommunications systems and services that enable communication, collaboration and business capabilities in support of the IRS’ Tax Administration mission. Specifically, the TSS investment ensures that IRS maintains a secure, stable and innovative network environment by providing and managing secure state-of-the-industry telecommunication systems to enable system, employee and taxpayer communication.

The Strategic Objectives of the investment are:

- **Customer Service** - providing exemplary IRS and Taxpayer access capabilities and service
- **Workforce Excellence (People)** – maintaining a satisfied, engaged and well-trained workforce equipped to provide outstanding service
- **Operational Excellence (Process)** – delivering higher service levels, on-time program delivery, lower costs and capacity gains achieved by efficient and effective business plan execution
- **Innovation and Business Value (Technology)** – providing increased business value, expanded capabilities, increased operational and resource capacity able to support changing business priorities

The impact of the TSS Investment is the facilitation of the IRS’ future state vision and IT agility by delivering innovative next generation technology to provide multichannel taxpayer access to IRS business organizations. The modernization of the IRS network and operations ensures a secure highway supporting tax administration and is the critical base for the IRS digitalization strategy which supports the IRS mission of helping taxpayers understand and meet their tax responsibilities and enforce the law with integrity and fairness.

### Accomplishments and Future Objectives:

- **Accomplishments:**
  - Providing a world class VoIP and video solution to the enterprise. This is an all in one solution that combines multiple phone related services such as voice, chat, fax, video and web conferencing onto a common converged network.
  - IRS transition to IPv6 completes the FY14 mandate for dual stacked IPv4 & IPv6 for all workstations, servers, and nodes within the network. Transition completed with zero impact to IRS users and benefits an enhanced network.
  - Completed an Infrastructure Upgrade Project (Endpoint Replacement) that replaced the Aspect Automated Call Distributors with an IP-based endpoint in support of our Contact Center Support Division.
  - Completed Contact Recording Refreshment that is responsible for recording 100% of all taxpayer interactions with IRS phone agents & a significant sampling of screens
  - Continued Unified Access Enforcement Mode deployment to reduce the attack vector, ensuring only approved users and devices can connect to the IRS network.
  - Replaced unsupported/noncompliant telecommunications hardware to permit Direct Model PIV enablement for router & switch management via elevated privilege (June 2015 Federal CIO directive).
  - Deliver AT&T NetBond for secure path with guaranteed bandwidth to the Cloud Service Providers.
  - Continued implementing WAN Acceleration technology across the network to optimize bandwidth, slow bandwidth growth, & reduce latency.
  - Continued deployment of next-gen Common Communications Gateway to increase capacity, virtualize, improve performance/monitoring/automation, virtualize, & increase security.

- **2019 and 2020 Objectives:**
  - Continue implementation of Enterprise Infrastructure Solutions (EIS) as the Treasury Networx re-compete acquisition vehicle for Treasury Wide network managed services and IRS Toll Free services. EIS is a major multiyear award that is replacing the General Services Administrations (GSA) current Networx Universal and Enterprise contracts as well as GSA Regional Local Service Agreements for government telecommunications and infrastructure solutions.
- Begin Network Segmentation to ensure only authorized users are allowed network access to IRS High Value Assets
- Implement DMVPN upgrades to “flatten” the WAN to eliminate hub aggregation points and provide more direct network paths between sites, improving network
- Continue to deliver outbound virtual desktop infrastructure for secure access to external web-based training, meetings, and collaboration
- Provide secure & robust network connectivity for off-premise Cloud initiatives
- Implement Enterprise File Storage (EFS) which enhances EEFax capabilities with electronic workflows & document management capabilities to eliminate printing for high-volume paper product lines and greatly reduce IT & Operational Costs.

IRS.GOV - Portal Environment

Description:
IRS portal provides seamless one-stop web-based services to internal and external users, such as taxpayers, business partners and IRS employees. The IRS.gov portal environment allows the IRS to provide 24x7 service to taxpayers at their convenience and facilitated 3.2 billion-page views and 293 million downloads in FY 2018.

Investment Obligations: (In Millions of $):

<table>
<thead>
<tr>
<th>Type</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>$ Change</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-Total DME Obligations (Including Internal labor (Govt. FTE))</td>
<td>20.31</td>
<td>19.32</td>
<td>22.82</td>
<td>3.50</td>
<td>18.12%</td>
</tr>
<tr>
<td>Sub-Total O&amp;M Obligations (Including Internal Labor (Govt. FTE))</td>
<td>57.85</td>
<td>70.82</td>
<td>72.03</td>
<td>1.21</td>
<td>1.71%</td>
</tr>
<tr>
<td>Total Obligations</td>
<td>78.16</td>
<td>90.14</td>
<td>94.85</td>
<td>4.71</td>
<td>5.23%</td>
</tr>
</tbody>
</table>

Purpose, Accomplishments, Future Objectives:
IRS portal provides seamless one-stop web-based services to internal and external users, such as taxpayers, business partners and IRS employees. The mission at the IRS is to provide Americas taxpayers top-quality services by helping them understand and meet their tax responsibilities and enforce the law with integrity and fairness to all. The IRS.gov website has the long-term goal of providing a virtual tax assistance center for internal and external users. This investment provides tax information, interactive tools, and enables landing page access to services for taxpayers, businesses, practitioners, electronic return originators and IRS employees.

Accomplishments:
- Supported WCMS operations and content updates for filing season and tax reform.
- Completed ACA Open Enrollment activities.
- Complete transition from IEP 1.0 to the new IEP 1.5 contract and began contract closeout of 1.0.
- Launch of Tax-Exempt Organization Search TEOS application.
- Provided on-going support to Web Apps releases.
- Completed Political Organization Filing & Disclosure POFD B/E release.
- Continued PUP to IEP Migration effort (Production Implementation
- Deployed the new open sourced, cloud-based Web Content Management System. Integrated Enterprise Portal Registered User Portal (RUP) -Supported the firewall hardware upgrade.
- Provided support of the onboarding of the new e-Authentication application, the new Online Account-ALT stream, the new eService's-ALT stream, the new SOR ALT stream and the new ACA RUP applications streams. Employee User Portal EUP.
- Coordinated and fulfilled upcoming new application onboarding requests to the EUP portal.
• Supported the firewall hardware upgrade.
• Affordable Care Act (ACA) Transactional Portal Environment (TPE).
• Supported the required activities for the following IRS Initiatives:
  o Martinsburg Failover to Memphis.
  o Memorial Day Martinsburg Power Down/Up. -Memphis Failback to Martinsburg.
  o Continued to support the ACA eAuth migration for all ACA User Interface Applications (ACA Forms Acceptance/ACA Assurance Testing Software/Information Sharing & Reporting) Applications.
  o Supported the firewall hardware upgrade.
• Supported the launch of the updated Withholding Calculator based on the new Tax Reform legislation.
• Launched the new cloud-based Field Assistance Scheduling Tool (FAST).

**2019 and 2020 Objectives:**
• Increase capacity, performance testing, and integration support to accommodate expected tax reform demand.
• Support application updates and identify any needed infrastructure changes.
• Plan for FS 2019 activities across all portals.
• Portal Ecosystem Application Re-engineering effort to modernize the legacy applications that reside in the IEP
• Support ongoing Tax Reform updates for content and applications.

**Modernized e-File (MeF)**

**Description:**

MeF is a critical component of the tax filing system. It provides service to institutional taxpayers by delivering a web-based system that allows electronic filing of corporate, individual, partnership, exempt organization and excise tax returns through the Internet. MeF is one of Treasury’s high value assets (HVAs) for its critical role in tax administration. The Office of Management and Budget defines HVAs are “those assets, systems, facilities, data, and datasets that are of particular interest to potential adversaries.” The IRS withstands approximately 1.4 bill cyber-attacks annually.

**Investment Obligations: (In Millions of $):**

<table>
<thead>
<tr>
<th>Type</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>$ Change</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-Total DME Obligations (Including Internal labor (Govt. FTE))</td>
<td>14.10</td>
<td>1.92</td>
<td>0.00</td>
<td>-1.92</td>
<td>-100.00%</td>
</tr>
<tr>
<td>Sub-Total O&amp;M Obligations (Including Internal labor (Govt. FTU))</td>
<td>49.40</td>
<td>55.60</td>
<td>70.84</td>
<td>15.24</td>
<td>27.42%</td>
</tr>
<tr>
<td>Total Obligations</td>
<td>63.49</td>
<td>57.52</td>
<td>70.84</td>
<td>13.32</td>
<td>23.16%</td>
</tr>
</tbody>
</table>

**Purpose, Accomplishments, Future Objectives:**

The Modernized e-file (MeF) Program provides a secure, web platform for electronically filing tax and information returns by registered Electronic Return Originators (EROs). This system uses a browser-based and application-to-application solution to provide ERO end users with optimized return filing. MeF is becoming the primary system for electronic filing of business and individual tax returns and forms.

The MeF program supports the Treasury and IRS strategic goals by effectively and efficiently using resources to optimize return filing, expand e-Government, and reduce taxpayer burden. Beneficiaries include the tax preparation community and the taxpayers they represent. MeF also benefits large corporations and tax-exempt organizations that are required at a specific asset threshold to electronically file their tax returns or annual information returns by reducing the handling/mailing of voluminous paper returns which sometimes exceed 700 attachments/schedules.

MeF has dependencies with the following investments:
• IRS.GOV - Portal Environment
• Information Return and Document Matching (IRDM)
• Individual Master File (IMF)
• Business Master File (BMF)
• Tax Return Data Base (TRDB)
• Electronic Fraud Detection System (EFDS).

FY 2019 Accomplishments and Future Objectives:
• Deploy MeF Release 10.2 which will allow changes due to ACA, FATCA, RRP and maintenance of MeF including hardware, software, security, helpdesk, training, etc.
• Develop MeF Release 10.3 which will allow maintenance of MeF including hardware, software, security, helpdesk, training, etc.

FY 2020 Future Objectives:
• Deploy MeF Release 10.3 which will allow maintenance of MeF including hardware, software, security, helpdesk, training, etc.
• Develop MeF Release 10.4 which will allow maintenance of MeF including hardware, software, security, helpdesk, training, etc.
• Migrate the application to a Linux Platform and improve hardware/software resiliency

Modernized IRS Operations

Description:
Modernized IRS Operations is a new investment that coincides with the release of the IRS Integrated Modernization Business Plan and the FY 2020 President’s Budget. The IRS will use innovative technologies and processes, such as Cloud, Agile, DevOps, Application Programming Interfaces, robotic process automation, and next generation infrastructure to reduce costs and manual effort.

Investment Obligations: (In Millions of $):

<table>
<thead>
<tr>
<th>Type</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>$ Change</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-Total DME Obligations (Including Internal labor (Govt. FTE))</td>
<td>0.00</td>
<td>20.50</td>
<td>20.00</td>
<td>-0.50</td>
<td>-2.5%</td>
</tr>
<tr>
<td>Sub-Total O&amp;M Obligations (Including Internal Labor (Govt. FTE))</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00%</td>
</tr>
<tr>
<td>Total Obligations</td>
<td>0.00</td>
<td>20.50</td>
<td>20.07</td>
<td>-0.43</td>
<td>-2.08%</td>
</tr>
</tbody>
</table>

Purpose, Accomplishments, Future Objectives:

Modernizing IRS Operations supports technology efforts that will provide continuous operations and systems availability to support taxpayer application access, analytics-based decision-making enabled by reliable and accessible data, efficient process execution through increased automation of transactional repeatable activities, increase speed of delivery of new capabilities, and safeguard taxpayer data.

This investment will enable modernized capabilities across IRS operations including:
• Automate manual processes using artificial intelligence and other advanced techniques freeing up IRS staff for more value-added work
• Quicker software deployment through automating delivery and infrastructure provisioning
• Create standard, reusable services and common application programming interface (API) code, reducing duplicative/"recreate" work for IRS employees, operational efficiency, reduced licensed cost, shared services platform
• More efficient, scalable, resilient and secure infrastructure.
This investment is for supporting activities for an objective of the current IRS Strategic Plan: Modernize and integrate technologies and systems that support secure, flexible and accurate work across IRS functions:

- Invest in the enhancement and integration of systems.
- Adopt iterative and flexible approaches to technology development and system updates.
- Maintain currency of hardware and software.
- Invest in innovative technologies and enable the delivery of secure, agile and efficient service offerings through cloud services.

The IRS is modernizing its business applications and adopting emerging technologies such as cloud, data analytics, DevOps automation, and leveraging Application Programming Interfaces (APIs) for reusable enterprise-wide services. The 2019 Companion document describes the deliverables in FYs 2019 and 2020 including: robotics process automation; application programming interface implementation; cloud execution; and next generation infrastructure.

**Return Review Program (RRP)**

**Description:**

The Return Review Program (RRP) is an automated system designed to maximize fraud detection at the time that tax returns are filed to eliminate the issuing of questionable refunds. RRP (and IRS Security Summit partners) has yielded significant benefits for taxpayers and the IRS:

- Between 2015 and 2018, the number of taxpayers reporting they were identity theft victims fell 71 percent. These are taxpayers who file identity theft affidavits. In 2018, the IRS received 199,000 reports from taxpayers compared to 677,000 in 2015. This was the third consecutive year this number declined. There were 242,000 identity theft reports in 2017 and 401,000 in 2016.
- Between 2015 and 2018, the number of confirmed identity theft returns stopped by the IRS declined by 54 percent. For 2018, there was a slight, 9 percent uptick in the number of confirmed identity theft returns, 649,000 compared to 597,000 in 2017. But the 2018 count is still significantly below the 883,000 in 2016 and the 1.4 million in 2015.
- Between 2015 and 2018, the IRS protected a combined $24 billion in fraudulent refunds by stopping the confirmed identity theft returns. In 2018, the 649,000 confirmed fraudulent returns tried to obtain $3.1 billion in refunds. The IRS protected $6 billion in 2017, $6.4 billion in 2016 and $8.7 billion in 2015.
- Between 2015 and 2018, financial industry partners recovered an additional $1.4 billion in fraudulent refunds. The financial industry is a key partner in fighting identity theft, helping the IRS and states recover fraudulent refunds that may have been issued. But as fewer fraudulent tax returns enter the system, fewer fraudulent refunds are being issued. In 2018, financial institutions recovered 84,000 federal refunds totaling $112 million for the IRS. Institutions recovered 144,000 refunds worth $204 million in 2017, 124,000 refunds worth $281 million in 2016 and 249,000 refunds totaling $852 million in 2015.

**Investment Obligations: (In Millions of $):**

<table>
<thead>
<tr>
<th>Type</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>$ Change</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-Total DME Obligations (Including Internal labor (Govt. FTE))</td>
<td>60.36</td>
<td>36.17</td>
<td>35.00</td>
<td>-1.17</td>
<td>-3.23%</td>
</tr>
<tr>
<td>Sub-Total O&amp;M Obligations (Including Internal Labor (Govt. FTE))</td>
<td>48.26</td>
<td>48.61</td>
<td>54.79</td>
<td>6.18</td>
<td>12.72%</td>
</tr>
<tr>
<td>Total Obligations</td>
<td>108.62</td>
<td>84.78</td>
<td>89.79</td>
<td>5.01</td>
<td>5.91%</td>
</tr>
</tbody>
</table>

**Purpose, Accomplishments, Future Objectives:**

Return Review Program (RRP) uses leading-edge machine learning technologies to advance Internal Revenue Service’s (IRS’) effectiveness to detect, resolve, and prevent criminal and civil tax refund fraud and non-compliance, maximize fraud detection in real-time, and protect taxpayer revenue from the risks of increasing global fraud sophistication. RRP is mission-critical for the IRS to combat the ever-evolving tax fraud in a sophisticated, scalable, and adaptable manner. It will be the anomaly detection platform for the enterprise for both pre-refund and post-refund fraud and non-compliance. RRP correlates data across multiple data sources and enables the IRS to create predictive models for fraud and non-compliance. RRP has been operational since 2015 and continues to perform today as Government’s primary line of defense against the perpetration of individual tax return identity
theft, fraud, and non-compliance after retiring the legacy fraud detection system in fall 2016. Since being operational (2015), RRP prevented the issuance of over $13 billion in fraudulent refunds. These are confirmed and tangible dollars that the IRS prevented from being issued. RRP’s return on investment is over 1700 percent and has helped reduce identity theft by over 60 percent since 2015. RRP’s primary customers are Wage and Investment (W&I), and Criminal Investigation (CI). RRP is currently collaborating with Large Business & International (LB&I) to expand anomaly / non-compliance detection to business returns.

2018 and 2019 Accomplishments:

- Implemented Target State Alternate Site Processing (ASP) solution, which provided a dedicated environment for Disaster Recovery, reducing Recovery Time Objective (RTO) from 6 to 9 days to under 10 hrs.
- Upgraded Linux servers, and added additional processing capacity to increase RRP’s ability to process high volume of tax returns.
- Enhanced RRP’s analytics by leveraging additional data fields made available by the Protecting Americans from Tax Hikes Act (the PATH Act) provisions. Individual returns claiming Earned Income Tax Credit (EITC) / Additional Child Tax Credit (ACTC) were processed through expanded detection to ensure compliance.
- Enhanced RRP’s analytics by developing automated methods to reprocess individual returns that were incorrectly selected as identity theft.
- Enhanced RRP by developing analytical techniques on business returns. RRP selections on business returns are available to users via reports.

2019 and 2020 Objectives:

- Develop a reporting solution that allows for the access and visualization of data (FY 2019 and 2020).
- Create new models and filters based on new schemes to prevent potential fraud (FY 2019).
- Plan and develop fraud detection functionality and enhance automated verification for business returns (FY 2020).
- Plan and expand the fraud detection functionality for foreign account withholding (ongoing).

Service Center Recognition/Image Processing System (SCRIPS)

Description:

SCRIPS is a data capture, management and image storage system that uses high speed scanning and digital imaging to process the 940, 941, 943, K-1, IRP, and ACA-IRP paper returns and converts data to electronic format for processing downstream.

Investment Obligations: (In Millions of $):

<table>
<thead>
<tr>
<th>Type</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>$ Change</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-Total DME Obligations (Including Internal labor (Govt. FTE))</td>
<td>0.26</td>
<td>0.06</td>
<td>0.00</td>
<td>-0.06</td>
<td>-100.00%</td>
</tr>
<tr>
<td>Sub-Total O&amp;M Obligations (Including Internal Labor (Govt. FTE))</td>
<td>8.97</td>
<td>9.63</td>
<td>9.85</td>
<td>0.23</td>
<td>2.34%</td>
</tr>
<tr>
<td>Total Obligations</td>
<td>9.23</td>
<td>9.69</td>
<td>9.85</td>
<td>0.16</td>
<td>1.68%</td>
</tr>
</tbody>
</table>

Purpose, Accomplishments, Future Objectives:

The Service Center Recognition/Image Processing System (SCRIPS) is a major paper input processing system specifically designed to automate the processing of Information Return Processing (IRP) forms, Schedule K-1’s (Forms 1041 K-1, 1065 K-1, and 1120 K-1), Form 941 (and associated Schedules B and Schedule R), Form 940 (and associated Schedule A and Schedule R) and Form 943 (and associated Schedule R). SCRIPS will process Affordable Care Act (ACA)-IRP Forms 1094-x and 1095-x. SCRIPS scans and stores images of all tax documents processed, saving time by converting the scanned images and data to computer-readable code and providing hardcopy images when requested. This is accomplished using the Optical Character Recognition/Intelligent Character Recognition (OCR/ICR) engine in addition to utilizing 2-Dimensional (2D) bar code recognition which optimizes and automates data entry of the taxpayer data. SCRIPS is one of the front-end input systems that operates at four IRS Service Centers where forms are received, sorted, and then sent to the scanning areas. SCRIPS sends the electronic taxpayer data to the IRS downstream tax processing systems, including Generalized Mainline Framework (GMF) and Master File for posting to the IRS database, as well as Service-Wide Employment Tax Research System (SWETRS) and
Statistics Of Income (SOI) for compliance. SCRIPS sends data to ACA Information Returns (AIR) database for Master Files. Images are archived and retained on the Enterprise Shared Storage platform. IRS Customer Service Representatives can request hard copies of images through the Integrated Data Retrieval System (IDRS). SCRIPS will deliver legislatively mandated Tax Year Changes to keep SCRIPS up-to-date. In addition, SCRIPS will program, test, and deploy new ACA functionality. SCRIPS processed more than 60 million tax forms in 2018 and expects to process 62 million tax forms in 2019. SCRIPS provides taxpayers fair and uniform application of the law, and increases efficiency for tax processing by converting paper forms to electronic images.

Accomplishments and Future Objectives:

- **FY 2019:**
  - SCRIPS will implement additional ACA changes.
  - Deliver legislatively mandated Tax Reform Changes to keep SCRIPS up-to-date.
  - Capture data from Schedules K-1 arriving near or after the December Program Completion Date that causes them to not be processed.
  - Submission Processing Consolidation: Continue supporting work required to prepare Ogden and Kansas City sites to process both Individual Master File (IMF) and Business Master File (BMF) taxpayer submissions.
  - The refresh of SCRIPS server infrastructure is planned.
  - Continue to support both Individual Master File (IMF) and Business Master File (BMF).

- **FY 2020:**
  - Consider proposals and options to leverage functionality between the Integrated Submission and Remittance Processing System (ISRP) and SCRIPS systems to improve efficiency and continue to reduce costs.
  - Continue migration of the SCRIPS Technical Requirements Documents (TRDs) currently in Microsoft Word format to the Rational Requirements Composer (RRC) system.
  - The refresh of SCRIPS server infrastructure.

### Web Applications

**Description:**

The Web Applications (Web Apps) investment improves interactions and communications across taxpayers, employers, the IRS, and third parties by providing a broad range of self-service options, establishing secure information exchange options, and building internal capabilities. The IRS.gov portal environment allows the IRS to provide 24x7 service to taxpayers at their convenience and facilitated 3.2 billion page views and 293 million downloads in FY 2018. Taxpayers used the Where’s My Refund tool hosted on the portal environment more than 387 million times during the 2018 filing season.

**Investment Obligations: (In Millions of $):**

<table>
<thead>
<tr>
<th>Type</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>$ Change</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-Total DME Obligations (Including Internal labor (Govt. FTE))</td>
<td>40.74</td>
<td>25.00</td>
<td>25.00</td>
<td>0.00</td>
<td>0%</td>
</tr>
<tr>
<td>Sub-Total O&amp;M Obligations (Including Internal Labor (Govt. FTE))</td>
<td>3.06</td>
<td>2.93</td>
<td>3.09</td>
<td>0.16</td>
<td>5.30%</td>
</tr>
<tr>
<td>Total Obligations</td>
<td>43.80</td>
<td>28.03</td>
<td>28.09</td>
<td>0.06</td>
<td>0.20%</td>
</tr>
</tbody>
</table>

**Purpose, Accomplishments, Future Objectives:**

The Web Applications (Web Apps) investment improves interactions and communications across taxpayers, employers, the IRS, and third parties by providing a broad range of self-service options, establishing secure information exchange options, and building internal capabilities. By enabling third parties and taxpayers to interact digitally with the IRS, the investment will provide a better user experience, achieve significant savings by moving services to lower cost channels, and deliver consistent data and services through reusable application programming interfaces (APIs). Web Apps will transform how the IRS does business by delivering a digital service that is the taxpayers’ first choice when interacting with the IRS to get the information they need when they need it. The FY 2020 request will lead the IRS to achieving enterprise themes of facilitating voluntary compliance by empowering taxpayers and tax professionals with innovative tools and support and driving more agility and efficiency in IRS operations. The Web Applications investment is a digital-first approach that enhances the taxpayer's online experience, provides secure digital communications, and adds more interactive capabilities to existing web self-service products.
In FY 2018 Web Applications developed new capabilities including Taxpayer Protection Program Identity Verification Service (TPP ID Verify). ID Verify will allow taxpayers who receive a 5071C (Potential Identity Theft) letter to verify their information online and determine whether they are a victim of identity theft. Additionally, foundational platform services will expand to accommodate additional applications. The Online Account operational hours were expanded allowing the taxpayer increased availability to access their account. In addition, implemented continuous security integration monitoring resulting no high or medium security findings in production and automated tested resulting in less defect outages. Thereby protecting taxpayer data with little disruption.

In FY 2019 IRS Web Applications will eliminate requirement for in-person visits by identity theft victims through an online ID verification service (TPP-ID Verify) and begin the development work to make online tax payments easier by submitting installment agreements online.

For FY 2020 per the IRS Modernization Plan, Web Applications will deliver initial capabilities for online Installment Agreements as well as Taxpayer Payment API with Fiscal Services. We will begin development of Discloser Authorization for Tax Pro.

### Major Non-IT Investments

#### Criminal Investigation Owned Vehicles

**Description:**

These 53 vehicles are owned by Criminal Investigation and are used for surveillance and for the Commissioner's protective detail.

**Investment Obligations: (In Millions of $):**

<table>
<thead>
<tr>
<th>Type</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>$ Change</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-Total DME Obligations (Including Internal labor (Govt. FTE))</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00%</td>
</tr>
<tr>
<td>Sub-Total O&amp;M Obligations (Including Internal labor (Govt. FTE))</td>
<td>2.308</td>
<td>2.347</td>
<td>2.347</td>
<td>0.00</td>
<td>0.00%</td>
</tr>
<tr>
<td>Total Obligations</td>
<td>2.308</td>
<td>2.347</td>
<td>2.347</td>
<td>0.00</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

**Purpose, Accomplishments, Future Objectives:**

These 53 vehicles are owned by Criminal Investigation and are used for surveillance and for the Commissioner's protective detail.

#### Criminal Investigations Capital Assets

**Description:**

This investment is managed by Criminal Investigation.
**Investment Obligations: (In Millions of $):**

<table>
<thead>
<tr>
<th>Type</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>$ Change</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-Total DME Obligations (Including Internal labor (Govt. FTE))</td>
<td>0.00</td>
<td>0.00</td>
<td>1.875</td>
<td>1.875</td>
<td>100.00%</td>
</tr>
<tr>
<td>Sub-Total O&amp;M Obligations (Including Internal Labor (Govt. FTE))</td>
<td>5.527</td>
<td>6.772</td>
<td>6.000</td>
<td>-0.772</td>
<td>-11.40%</td>
</tr>
<tr>
<td>Total Obligations</td>
<td>5.527</td>
<td>6.772</td>
<td>7.875</td>
<td>1.103</td>
<td>16.30%</td>
</tr>
</tbody>
</table>

**Purpose, Accomplishments, Future Objectives:**

This investment is managed by Criminal Investigation. These assets are used to protect CI special agents from threats and bodily injury while performing their law enforcement duties including conducting investigations concerning alleged criminal tax fraud violations, financial crimes, and other related offenses.

**Leasehold Improvements**

**Description:**

Leasehold Improvements managed in AWSS.

**Investment Obligations: (In Millions of $):**

<table>
<thead>
<tr>
<th>Type</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>$ Change</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-Total DME Obligations (Including Internal labor (Govt. FTE))</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00%</td>
</tr>
<tr>
<td>Sub-Total O&amp;M Obligations (Including Internal Labor (Govt. FTE))</td>
<td>6.250</td>
<td>6.500</td>
<td>6.750</td>
<td>0.250</td>
<td>0.04%</td>
</tr>
<tr>
<td>Total Obligations</td>
<td>6.250</td>
<td>6.500</td>
<td>6.750</td>
<td>0.250</td>
<td>0.04%</td>
</tr>
</tbody>
</table>

**Purpose, Accomplishments, Future Objectives:**

Many projects undertaken by IRS entail the design, alteration, and furnishing of space either upon acquisition, at lease renewal, or for other purposes, such as supporting space consolidation or reduction. The portion of the project that is captured as a capital asset is reflected in OMB Object Class 3200, Land and Structures, and includes alterations to buildings; fixtures such as elevators, plumbing, power-plant boilers, fire-alarm systems, lighting, heating systems, air-conditioning systems, flooring, and carpeting. The total figure is a sum of the expenditures in that object class for all IRS projects in that particular year.

**Security Equipment**

**Description:**

Security Equipment is managed in FMSS.
Investment Obligations: (In Millions of $):

<table>
<thead>
<tr>
<th>Type</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>$ Change</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-Total DME Obligations (Including Internal labor (Govt. FTE))</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00%</td>
</tr>
<tr>
<td>Sub-Total O&amp;M Obligations (Including Internal Labor (Govt. FTE))</td>
<td>2.945</td>
<td>4.913</td>
<td>5.060</td>
<td>0.147</td>
<td>0.03%</td>
</tr>
<tr>
<td>Total Obligations</td>
<td>2.945</td>
<td>4.913</td>
<td>5.060</td>
<td>0.147</td>
<td>0.03%</td>
</tr>
</tbody>
</table>

Purpose, Accomplishments, Future Objectives:

The IRS purchases security equipment such as cameras, digital video recorder system (DVRs), access control panels, and card readers. The IRS uses facility-specific security assessments to prioritize asset needs and develop criteria for replacing equipment in a given facility. Additionally, emergency needs arise over the course of the year. These needs are ranked and funded according to the effect the equipment has on the overall security posture. The need for equipment can arise at any time, such as when employees are moved into a new building, during internal moves, or intermittently when equipment needs to be replaced. The benefit of this capital asset investment is that it supports the IRS priority to provide a safe and secure environment for its employees, equipment, and facilities.