Department of the Treasury Internal Revenue Service

FY 2023 Capital Investment Plan

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

- FY 2021 Actuals Total actual obligations
- FY 2022 Estimated Obligations Anticipated obligation from all budgetary resources (i.e., balances from prior years, reimbursables, user fees, and FY 2022 CR levels).
- FY 2023 President's Budget (Estimated Obligations) Anticipated obligation from all budgetary resources (i.e., balances from prior years, reimbursables, user fees, and FY 2023 President's Budget).

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:

Туре	FY 2021 Actuals	FY 2022 Estimated Obligations	FY 2023 President's Budget (Estimated Obligations)	\$ Change	% Change
Sub-Total DME Obligations (Including Internal labor (Govt. FTE))	0.42	0.00	0.00	0.00	0.00%
Sub-Total O&M Obligations (Including Internal Labor (Govt. FTE))	11.94	13.08	12.93	-0.14	-1.08%
Total Obligations	12.36	13.08	12.93	-0.14	-1.08%

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 and Government Entities (TE/GE) 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 nine case management and referral inventories.

FY 2021 Accomplishments:

• Implemented changes for the annual Allowable Living Expenses (ALE). The ALE standards help determine a taxpayer's ability to pay a delinquent tax liability

- Made corrections to the Recovery Rebate Credit, Form 2210, and Form 2210 Schedule AI worksheets
- Made changes to the Affordable Care Act (ACA) Tools, Checklists, electronic-4442, Taxpayer Assistance Center (TAC), Tax Return Data, and worksheets related to annual updates
- Implemented the SB/SE Collection solution for scanning Installment Agreements from Ephesoft to SharePoint

FY 2022-2023 Goals/Objectives:

- To continue to deliver User Interface upgrades and migration
- Implement Data at Rest Encryption for AMS and Commercial Off the Shelf (COTS) software databases
- To review the possibility of adding Correspondence Imaging Inventories for business units other than W&I to allow for greater flexibility in managing taxpayer correspondence digitally

Affordable Care Act Administration

Description:

The Affordable Care Act (ACA) investment encompasses the planning, development, and implementation, operations and maintenance of IT systems needed to support IRS' tax administration responsibilities associated with key provisions of the ACA legislation.

Investment Obligations:

Туре	FY 2021 Actuals	FY 2022 Estimated Obligations	FY 2023 President's Budget (Estimated Obligations)	\$ Change	% Change
Sub-Total DME Obligations (Including Internal labor (Govt. FTE))	0.00	0.00	0.00	0.00	0.00%
Sub-Total O&M Obligations (Including Internal Labor (Govt. FTE))	65.04	65.78	64.40	-1.38	-2.10%
Total Obligations	65.04	65.78	64.40	-1.38	-2.10%

Purpose, Accomplishments, Future Objectives:

The ACA Administration investment supports IRS tax administration responsibilities associated with the key provisions of the ACA legislation. Including Releases 1.0 through 7.1:

- Supporting the implementation of 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, and Hospital Insurance Tax.
- Providing 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.

• Expanding information return processing and capabilities needed for compliance processing.

FY 2022-2023 Goals/Objectives:

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 annual filing seasons and Open Enrollments and CPE updates to existing non-ACA systems that support ACA. Additionally, IRS will focus on maintaining the ACA systems and upgrading as needed to ensure security and conform to IRS standards and guidelines for infrastructure currency.

Customer Account Data Engine 2 (CADE 2)

Description:

CADE 2 is IRS's modernized core tax processing system. It leverages modern-day database technology, programming languages, and principles to determine refunds, penalties, and interest. CADE 2 also monitors compliance and tracks historical data about individual taxpayer accounts. Additionally, CADE 2 implements a data-centric solution, which provides daily processing of taxpayer accounts.

Investment Obligations:

Туре	FY 2021 Actuals	FY 2022 Estimated Obligations	FY 2023 President's Budget (Estimated Obligations)	\$ Change	% Change
Sub-Total DME Obligations (Including Internal labor (Govt. FTE))	106.67	165.87	231.73	65.86	39.71%
Sub-Total O&M Obligations (Including Internal Labor (Govt. FTE))	14.81	14.33	13.70	-0.63	-4.43%
Total Obligations	121.48	180.20	245.43	65.23	36.20%

Purpose, Accomplishments, Future Objectives:

CADE 2 implements a single, data-centric solution to provide daily processing of taxpayer accounts and address the Financial Material Weaknesses (FMW) (downgraded to a Significant Deficiency (SD) in 2018) and maintain IRS's clean audit opinion.

CADE 2 was chartered in 2009 to provide 21st century technology and digital services to the taxpayer and IRS employees. The CADE 2 solution includes an authoritative database for individual taxpayer data that is transforming the way the IRS approaches tax administration. In addition, CADE 2 is improving data processing rates by reducing the latency of antiquated technology. CADE 2's goals are:

- Establish one authoritative source for taxpayer data by leveraging a relational database and daily processing.
- Continue IT modernization efforts so business processes can be realigned to enable better taxpayer service and timelier compliance.

- demonstrate compliance with Federal Information System Controls Audit Manual, maintain a clean audit opinion; and
- Improve security and privacy posture.

CADE 2 is progressing through the largest part of the program, Target State 2 (TS2) (funded by the Business Systems and Modernization appropriation). Two initial goals of TS2 are to establish the CADE 2 database as the authoritative data source for financial and legal purposes and address the Unpaid Assessment FMW.

Transition State 1 (TS1) and TS1.5 built and initialized the CADE 2 database in production. In doing so, the IRS accelerated the return processing cycle from weekly to daily and moved the management of individual taxpayer account data from 1960s sequential flat files to state-of-the-art relational database technology. CADE 2 leverages relational formats dictated by a data model that maintains historical values on account transactions, with instant viewing of taxpayer account data by IRS customer service representatives. TS1 delivered faster refunds, notices, and payment postings, improving service for taxpayers.

FY 2021-2022 Accomplishments:

CADE 2 is progressing through TS2. Starting in FY 2018, resources focused on reengineering the IMF's core components (Runs 12 and 15) through the Individual Tax Processing Engine (ITPE) project. The project has converted over 73 percent of the legacy code for ITPE (as of December 2021) and completed initial conversion of Run 12. Additionally, Treasury Inspector General for Tax Administration recently completed an audit on ITPE, which resulted in providing no recommendations.

Key accomplishments in TS2 include: (1) implemented common code across IRS systems to enable consistent and accurate Penalty and Interest calculations on financial statements and (2) deployed database conversion capability allowing IRS to retain expanded taxpayer history for approximately two billion taxpayer records, improving service and enhancing compliance.

CADE 2 has kicked off CADE 2 Data Marketplace Project (C2DM), which will enable access to CADE 2 data through Application Programming Interfaces (APIs). C2DM plans on publishing the first set of APIs by the fourth quarter of FY 2022, while planning for future APIs continues in parallel.

FY 2022-2023 Goals/Objectives:

The IRS IT Modernization Plan sets goals for modernization efforts and will be updated periodically to reflect progress. For TS2 and Target State, initial FY2022 - FY2024 milestones have been established for ITPE and C2DM. ITPE will complete the modernization of core tax processing by the end of FY 2023 and focus on testing in FY 2024. CADE 2 will also continue to plan for the Target State solution, including processing directly of the CADE 2 Database, while iteratively updating the Target State Plan. Target State goals include enhancing taxpayer experience and empowering the IRS workforce by making data available for downstream consumption.

e-A3 (Authentication, Authorization, Access)

Description:

e-Authentication, Authorization and Access (eA3) is an enterprise solution, serving as the front door for IRS and is available for all taxpayer facing applications. eA3 enables Secure Access Digital Identity (SADI), Authentication, and Authorization (Az Framework) for registration and online access to critical Taxpayer facing resources. eA3 protects taxpayer data from cyber-attacks and fraud by identity proofing and authenticating online users. It allows collaboration with external partners, advances data accessibility, usability, and analytics.

Investment Obligations:

Туре	FY 2021 Actuals	FY 2022 Estimated Obligations	FY 2023 President's Budget (Estimated Obligations)	\$ Change	% Change
Sub-Total DME Obligations (Including Internal labor (Govt. FTE))	70.13	41.68	14.72	-26.96	-64.69%
Sub-Total O&M Obligations (Including Internal Labor (Govt. FTE))	21.50	22.23	19.69	-2.54	-11.41%
Total Obligations	91.64	63.91	34.41	-29.50	-46.16%

Purpose, Accomplishments, Future Objectives:

Securing personal data while still providing taxpayers access is one of the IRS's highest priorities. The IRS must conduct ongoing assessments to meet evolving threats. Self-help tools that give taxpayers access to their records are under constant evaluation. Online tools are central for improving the taxpayer experience. Without rigorous security, these tools are at risk. eA3 is an enterprise solution, serving as the front door for Taxpayer facing apps. The IRS will rely on an external Credential Service Provider (CSP) to provide identity verification, which will allow IRS to meet the latest standards set by the National Institute of Standards and Technology (NIST). Soon, the IRS will also add several online tools to this new identity verification process that will be secure and easy for taxpayers to validate.

eA3 is currently working on three projects: SADI, Electronic Signature Storage and Retrieval (ESSAR), Az Framework.

SADI is developing a NIST 800-63-3 compliant solution to replace Authentication, NIST 800-63-2. This solution will integrate taxpayer-facing apps, expand modernized cloud infrastructure, employ federated identity and authentication across network systems, work towards integrating Omni-Channel support, deploy advanced fraud detection and prevention, and automate incident response. The Az Framework provides authorization checks for applications and taxpayer records, validates user authorizations and expands the list of client applications and supporting data. SADI provides authorization check for eServices Terms of Service application and is scheduled to support Taxpayer First Act (TFA) Section 2201 Income Verification Express Service authorization checks. The roadmap includes connection to the Central Authorization File database to allow for more authorization checks in the future.

ESSAR is a single component of the IRS's electronic signature solution (E-Signature product) and is the first component to have been completed. ESSAR provides the client applications with the ability to store and retrieve an electronic signature and increases performance, and enhances security. ESSAR has incorporated automated testing, and the Deployment and Release Integration and Visibility Engine technology for deployments.

FY 2021 Accomplishments:

• Accomplished service development and testing. Deployment to production was delayed until a client application was given approval to move forward. The original Production deployment was completed on 12/06/2020 and Final Go-Live in Production was linked to Production deployment of Tax Pro Minimal Viable Product (MVP) as ESSAR's client was in July of 2021.

FY 2022-2023 Future Objectives:

- Comply with additional requirements under the NIST 800-63-3 guidelines.
- Unify the taxpayer experience by establishing an integration point for non-digital channels to link with digital accounts.
- Modernize Secure Access to leveraging updated software, hardware, and cloud technologies to take advantage of scaling technology to increase system availability.
- Expand and automate Fraud detection, user metrics and operations monitoring.
- Expand customer services by integrating new applications to Federate with an external CSP to expand taxpayer coverage.
- Move to containers, migrate to the Web Services cloud, integrate with additional client applications, and incorporate back-end monitoring. With additional IRS forms going online, ESSAR will continue to add client applications.

Az Framework –provides authorization checks for applications and taxpayer records by validating the user authorizations and will expand its list of client applications and supporting data. Provides authorization check for eServices Terms of Service application and is scheduled to support Taxpayer First Act (TFA) Section 2201 Income Verification Express Service (IVES) authorization checks. The roadmap includes connection to the Central Authorization File database to allow for finer authorization checks in the future.

FY 2022 Goals:

Az Framework is providing enhancements, client application integration, and operations and maintenance and will continue to add new client applications and support additional data sources.

FY 2022-2023 Goals/Objectives:

Az Framework will support SADI and eServices with the redesign of the eAuthentication personalities. Az Framework will provide the authorization checks for tax professionals who are attempting to access taxpayer records.

e-Services (e-SVS)

Description:

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. E-Services is in the operations and maintenance phase of its lifecycle. As result, e-Services annually delivers changes for e-Services and delivers Transcript Delivery System (TDS) Late Legislative and Wage and Income Updates.

Investment Obligations:

Туре	FY 2021 Actuals	FY 2022 Estimated Obligations	FY 2023 President's Budget (Estimated Obligations)	\$ Change	% Change
Sub-Total DME Obligations (Including Internal labor (Govt. FTE))	5.29	0.84	0.26	-0.57	-68.55%
Sub-Total O&M Obligations (Including Internal Labor (Govt. FTE))	8.85	9.76	9.49	-0.27	-2.78%
Total Obligations	14.14	10.59	9.75	-0.84	-7.97%

Purpose, Accomplishments, Future Objectives:

The purpose of the e-Services application programming is to allow interfacing that provides tools to effectively leverage the indirect channel of third-party relationships. The eServices application has expanded the type of users supported, which allows these services to be offered to more third-parties and even individual taxpayers. One example is a tax transcript. eServices has implemented expanded services securely and with minimal production issues to accommodate the increased number of requests. For FY 2022, eServices is working to expand its user base in support of IRS Taxpayer First Act implementation, the improvement of online information return processing, and the automation of the IVES process. eServices will continue to enhance the application's infrastructure and functionality, assuring that IRS third-parties and individual taxpayers can efficiently prepare, submit, and make payments on taxes.

FY 2021 Goals:

• Delivered updates that align with the Taxpayer First Act for e-Services applications.

FY 2022 Goals:

- Integrate behind SADI.
- Deliver five Taxpayer First Act solutions: Fingerprint Digitization, Information Return Modernization, Filing Information Returns Electronically Transition, Modernized eFile (MeF) Assurance Testing System Automation, and add three new MeF tax types.

FY 2023 Goals:

• Deliver one Taxpayer First Act solution: IVES.

- Deliver one EIN solutions: Automate Certified Acceptance Agents. (Deployment 12/2022, majority of development in FY22).
- Incorporate new users into External Systems Access Management.

Enterprise Case Management (ECM)

Description:

Enterprise Case Management (ECM) provides the IRS with an enterprise solution for streamlining case and workload management processes to improve the quality and effectiveness of case interactions with individual taxpayers, small and large businesses, tax-exempt organizations, and a wide spectrum of intermediaries. ECM will digitize case information, provide business automation, and increase resource alignment across IRS business units to improve customer service and reduce the timeframe for case resolution. In 2020, ECM Release 1 delivered the foundational platform and capabilities of a new cloud-based case management solution, while in 2021 Releases 2 and 3 delivered integrations with Microsoft Exchange Server to allow for an email to trigger systemic case creation, as well as foundational data services. Subsequent ECM releases in 2022 and beyond will provide integrated case management to a widening circle of business units across the IRS.

Investment Obligations:

Туре	FY 2021 Actuals	FY 2022 Estimated Obligations	FY 2023 President's Budget (Estimated Obligations)	\$ Change	% Change
Sub-Total DME Obligations (Including Internal labor (Govt. FTE))	60.05	141.00	91.78	-49.22	-34.91%
Sub-Total O&M Obligations (Including Internal Labor (Govt. FTE))	0.00	0.00	0.00	0.00	0.00%
Total Obligations	60.05	141.00	91.78	-49.22	-34.91%

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 helps drive modernization efforts across the IRS, leading to increased business and IT efficiencies and improved customer service while enabling the retirement of legacy case management systems/components.

The IRS envisions modernizing and standardizing enterprise-wide case management processes and systems to provide top quality service to taxpayers. ECM will empower employees to rapidly resolve cases in a simplified technical environment, designed to drive efficiency and collaboration. By the end of FY 2022, the ECM Program should be on a path towards achieving organizational transformation:

- ECM's target platform and core capabilities are in use for case management, with several major business organizations having an operational footprint on the target platform and demonstrating value to the taxpayer.
- ECM adoption and evolution continues in FY 2023 and beyond as part of the normal course of IRS business, enabling incremental retirement of legacy case management systems/components.

The IRS selected Pega software as the ECM platform in August 2019; however, after a GAO protest and subsequent corrective actions the completion of the acquisition was delayed until April 2020. Release 1, delivered in December 2020, provided IT and Business foundational and case management capabilities for the Tax Exempt/Government Entities (TE/GE) Exempt Organization Customer Service group. The program delivered Release 2 in May 2021; this release focuses on capabilities and data connections to enable multiple processes in the ECM backlog. It included the April 2021 delivery of Wage & Investment (W&I) Grants Management and the May 2021 deployment of External Referrals to a production environment.

Additionally, the ECM program utilized an expedited delivery pilot mechanism to develop a high-fidelity prototype for the Equity Diversity and Inclusion (EDI) Anti-Harassment and Sexual Harassment business process. Release 3 was completed in December 2021, included updates to the Pega platform, and delivered new capabilities to multiple existing ECM applications. It also deployed EDI to production in May 2021.

FY 2022-2023 Goals/Objectives:

For 2022, Release 4 and Release 5 will focus on establishing the Exam line of business application and enabling further business migration to ECM.

The program has developed a multi-year Technical Integration Plan to map planned technical enablers and dependencies required to enable the migration of business processes. In order to align to the Scaled Agile Framework®, the ECM Initiative has implemented quarterly Strategic Portfolio Reviews to strengthen the health of ECM's portfolio and generate strategic alignment among ECM's stakeholders.

In 2021, ECM developed and finalized an ECM Initiative Decommissioning Strategy, which will inform and drive legacy case management retirements. Additionally, the strategy created an ECM Initiative Portfolio Roadmap that outlines the business processes for migration into ECM for the next three years. ECM stood up a second Agile Release Train (ART) in February 2022 and anticipates scaling capacity through FY 2023 by adding resources to ART 1 and ART 2. The program will also implement an Enterprise Case Repository database in 2022; this will simplify and make more efficient the storage and retrieval of case data and analytics support.

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, where 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 to promote compliance for U.S. taxpayers using foreign accounts, as directed by Congress.

Investment Obligations:

Туре	FY 2021 Actuals	FY 2022 Estimated Obligations	FY 2023 President's Budget (Estimated Obligations)	\$ Change	% Change
Sub-Total DME Obligations (Including Internal labor (Govt. FTE))	0.00	0.00	0.00	0.00	0.00%
Sub-Total O&M Obligations (Including Internal Labor (Govt. FTE))	23.58	25.82	25.49	-0.32	-1.25%
Total Obligations	23.58	25.82	25.49	-0.32	-1.25%

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. For FFIs with U.S. taxpayer accounts, they must 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 accountholder information. In addition to foreign account and asset data submitted by taxpayers and entities, IRS will assemble and transmit Bank Deposit and Interest data on accounts held by foreign nationals from U.S. financial institutions (FIs) to foreign government Host Country Tax Authorities, 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. 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. Release details are explained in further detail below. In FY 2018, IRS implemented legislative requirements that allowed for maintenance of the QI, FI System, and ICMM releases. Additionally, it included the 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 FIs worldwide, establishing a streamlined environment to register and ensuring data security. As of February 28, 2022, 431,908 FIs have registered.

- Developed the Global Intermediary Information Number, which is issued to FIs that register with the IRS. This 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 in cooperation with foreign governments. Information sharing pursuant to IGAs will take place in accordance with these standards.
- Released new FATCA forms and deployed a global platform called 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 the Treasury.
- Implemented Reciprocal Data Exchanges to include Form 1042S-Withholding Agent changes, application submissions, QI Agreements, and the Renewal of FI Agreements.
- Released certification process and features to allow FATCA FI and QI to stay compliant with FATCA. Enhanced capabilities to improve and support the certification process

FY 2022/2023 Objectives:

The long-term goals of the FATCA Program will be achieved through sustainment of infrastructure through continuous monitoring of Operations and Maintenance (O&M) for deployed FATCA systems in the event there are break/fix needs. The long-term goals are based on the program's former release plan, which outlined a prioritized approach of addressing required legislative mandates, delivery of new/enhanced business capabilities, risk reduction/mitigation, evaluation of program deficiencies in system capabilities, reduction of manual workarounds for the Business and IT, improvement of FATCA compliance practices, and established IT capabilities that could 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 the IRS's ability to process tax returns. IMF is one of Treasury's High Value Assets (HVAs) because of its critical role in tax administration. The Office of Management and Budget Memorandum M-17-09 Management of Federal High Value Assets defines HVAs as "Federal information systems, information, and data for which an unauthorized access, use, disclosure, disruption, modification, or destruction could cause a significant impact to the United States' national security interests, foreign relations, economy, or to the public confidence, civil liberties, or public health and safety of the American people."

Investment Obligations:

Туре	FY 2021 Actuals	FY 2022 Estimated Obligations	FY 2023 President's Budget (Estimated Obligations)	\$ Change	% Change
Sub-Total DME Obligations (Including Internal labor (Govt. FTE))	6.15	25.12	91.08	65.96	262.58%
Sub-Total O&M Obligations (Including Internal Labor (Govt. FTE))	19.78	10.34	10.03	-0.32	-3.07%
Total Obligations	25.94	35.46	101.11	65.64	185.10%

Purpose, Accomplishments, Future Objectives:

IRS is responsible for collecting revenue from individuals to fund the operations of the federal government. To effectively accomplish this goal, it must maintain authoritative data on individual taxpayers. The IMF is the authoritative data store for individual taxpayer's 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.

IMF is a complex suite of legacy components, originating in the 1960's and has been extensively expanded and modified through the years. IMF's original objective was to maintain and balance the individual taxpayer account data. Over time, many ancillary functions were added to IMF scope and objectives, such as providing hundreds of taxpayer account data extracts from IMF to other systems, for tax processing supporting other functions, including reporting. In FY22 IRS started to embark upon modernizing IMF. IMF Modernization will lay the foundation to transform the IRS to be a world class financial and revenue collection agency.

The IMF sits at the heart of every function performed by the service and its modernization is foundational to several strategic priorities. The IMF Modernization Portfolio completes the work started by the CADE 2 Program. New IMF Modernization initiatives will fully modernize individual taxpayer account management functions and distribution of individual taxpayer account data. They will also decommission legacy IMF, dramatically simplifying how individual taxpayer account data is shared with IRS Web Applications, Enterprise Case Management, and Financial Reporting. It will also support adoption of modernized solutions for downstream systems and end users. Most importantly, the benefits to the taxpayers include more accurate and reliable information on their account status and the availability of modernized reporting and analytics capabilities for individual taxpayer reports.

FY 2021 Accomplishments:

• IMF continues to fill the functional needs of the individual taxpayer account processing and to perform Operations and Maintenance for tax law changes.

FY 2022-2023 Goals/Objectives for IMF (O&M): Future endeavors include:

- Translating key IMF runs from Assembly Language Coding to Java in conjunction with the CADE 2 and Individual Tax Processing Engine projects.
- Interact with programs that impact IMF.
- Continue performing Operations and Maintenance for tax law and maintenance changes.

FY 2022-2023 Goals/Objectives for IMF Modernization:

- Analyze downstream usage of IMF data in order to prioritize and plan IMF component (programs or datafiles) optimization; create overall Optimization Roadmap; and complete optimization of first set of IMF Runs.
- Design a new cloud-native Individual Taxpayer Analytical Datastore to be used as a source for creating business reports and extracts. This work includes:
 - Finalizing analytic data store use cases.
 - Identifying preliminary technology stack for analytic datastore.
 - Completing the logical and physical design.

Information Returns Modernization (IR Mod) formerly Business Services

Description:

Information Returns Mod (IR Mod) program will transform and modernize end-to-end IR pipeline, improving data while also enabling technological advancement within IRS. Over the next several years, this will enhance compliance and enforcement activities and help close the tax gap by increasing processing efficiency, retiring legacy IR systems, and expanding self-service capabilities to taxpayers. Initial release of IR Mod (R1) will be delivered on January 1, 2023, to meet the legislatively mandated date set by Taxpayer First Act Provision 2102. R1 includes deployment of a cloud-based multi-channel intake interface for the 1099 Form Family and downstream modernization that lays the foundation for future releases. IR Mod will provide a simple and secure manner for small businesses and form transmitters to file critical IRs electronically through an online business services platform. This platform will enable small business to prepare and file information returns online, while preparing payee statements and creating business records.

Туре	FY 2021 Actuals	FY 2022 Estimated Obligations	FY 2023 President's Budget (Estimated Obligations)	\$ Change	% Change
Sub-Total DME Obligations (Including Internal labor (Govt. FTE))	49.62	67.47	7.57	-59.90	-88.78%
Sub-Total O&M Obligations (Including Internal Labor (Govt. FTE))	0.00	0.00	0.00	0.00	0.00%
Total Obligations	49.62	67.47	7.57	-59.90	-88.78%

Investment Obligations:

Purpose, Accomplishments, Future Objectives:

The IRS will continue to evolve core information return filing systems to provide the quicker and easier filing services that taxpayers expect. These outcomes will be realized through data-driven operations and decision-making and core information returns systems modernization. IR Mod supports the goal of enhancing systemic identification of noncompliance and fraud. It also has the goal of decreasing false positives by improving data quality and availability for downstream compliance. Long-term, these efforts will contribute to the IRS's ability to increase taxes collected as a percentage of taxes owed by increasing efficiency of audits and voluntary compliance, since taxpayers will find it easier to make self-corrections.

FY 2021 Accomplishments:

- Integrated across the IT organization to obtain Integrated Master Scheduled (IMS) inputs from each delivery partner and received baseline approval from the IT Enterprise Executive Steering Committee on July 15, 2021. The IR Mod Phase 1 program also integrated with the Filing Season Integration Services team to integrate into the filing season 2022 IT IMS.
- Socialized design deliverables to IT delivery partners for inputs and feedback. The program received the IR Mod Phase 1 technology stack on June 04, 2021, and socialization sessions were held with IT delivery partners to gain alignment and drive progress on the documented technology solutions that will be used to deliver Phase 1 and future phases.
- Submitted Mid-Year 2022 (MY22) Unified Work Requests (UWRs) and other necessary change requests (CRs) to support development and delivery activities for MY22 Integration.

FY 2022 Future Objectives:

- Develop and implement IR Mod Phase 1 Release Management Plan.
- Initiate planning and development activities for MY22 delivery components, including enhancements to legacy systems and integration with SADI and eServices.

FY 2023 Future Objectives:

• IR Mod Phase 1 is scheduled to go into production in FY 2023.

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:

Туре	FY 2021 Actuals	FY 2022 Estimated Obligations	FY 2023 2023 President's Budget (Estimated Obligations)	\$ Change	% Change
Sub-Total DME Obligations (Including Internal labor (Govt. FTE))	1.01	0.20	0.15	-0.05	-23.35%
Sub-Total O&M Obligations (Including Internal Labor (Govt. FTE))	12.82	12.28	12.10	-0.18	-1.45%
Total Obligations	13.84	12.47	12.25	-0.22	-1.80%

Purpose, Accomplishments, Future Objectives:

ICCE protects the integrity of tax system. ICCE functionality includes:

• Get Transcript - allows authenticated taxpayers to securely view copies of their account online.

- Order a transcript allows taxpayers to order transcripts online. Online Payment Agreement (OPA) allows the taxpayer or Power of Attorney and qualified businesses to apply for and receive online approval for a short-term extension to pay or set up a monthly installment agreement.
- Identity Protection PIN (IPPIN) allows taxpayers the option to obtain a PIN to protect their tax data.
- Internet Refund Fact of Filing and Where's My Refund (WMR) allows taxpayers to view their tax refund status information via the web to Form 1040 (individual) series filers.
- Where's My Amended Return allows taxpayers to check the status of their amended returns via web or phone.
- Internet Refund Trace allows taxpayers who have not received paper refunds after a specific amount of time to initiate a refund trace.
- Modernized Internet Employer Identification Number (MOD IEIN) allows users to apply for an Employer ID number (EIN) online.
- ICCE Telephone Apps allows individual taxpayers to interact directly with their accounts by phone.
- ICCE Online Services (OLS) -Web services and mobile apps, which are designed to be used via smartphone technology. Applications include Offer In Compromise Calculator, Return Preparer Look-Up Tool, IRS2Go, Volunteer Income Tax Assistance, etc.
- Federal Student Aid Datashare (FSA-D) provides taxpayers completing the Free Application for Student Aid (FAFSA) through the Department of Education's FAFSA website with access to relevant tax data from their filed individual Federal tax return via a web-based app.
- Private Debt Collection data transfer component provides a legislatively mandated functionality for Private Collection Agencies to collect certain categories of past due taxes for individual taxpayers and businesses.
- Fostering Undergraduate Talent by Unlocking Resources for Education (FUTURE) Act Direct Data Exchange (FA-DDX) implements the FUTURE Act legislative mandate, and provides an application programming interface for the Department of Education that securely retrieves taxpayers' Federal tax information for completing the FAFSA.

FY 2021 Accomplishments include:

- Get My Payment
 - Assisted with the delivery of multiple economic stimulus payment statuses by allowing taxpayers to check their payment status, and it also included an option to choose a debit card as a method of payment.
- Online Payment Agreement (OPA)
 - The eligibility date was changed to May 17, 2021, as result of extending Filing season 2021 due to COVID-19.
 - Allowed users to update the Installment Agreement for existing payment agreement revisions.
- Call Processing
 - Implemented "Topic Base Routing Menu" to more accurately route callers based on the call inquiry.
 - Provided two menu options for taxpayers to access natural language Frequently Asked Questions about IRS notices and paying off installment agreements.
- Offer in Compromise

- Updated allowable living expenses values used for calculation.
- Identity Protection Personal Identification Number (IP PIN).
 - Expanded and completed the implementation of IP PIN nationwide.
- ICCE Resiliency
 - Updated three ICCE applications to allow taxpayers to continue to access the applications in the event the Integrated Data Retrieval System is down.

FY 2022 Accomplishments:

- Get My Payment
 - Retired the application.
- FA-DDX
 - Deployed the Application Programming Interface (API) to directly exchange tax information with the Department of Education.
- FSA-D
 - Integrated with the new site for the Department of Education applications (Studentloan.gov).
- Automated Collection System Conversational Interactive Voice Response (ACI)
 - Deployed two functionalities using the automated call routing Voice Bot in a joint venture with User and Network Service (UNS)/Contact Service Support Division (CCSD). Continued to deliver additional applications utilizing the Voice Bot feature in four phases.
- Online Payment Agreement (OPA) and Voice Balance Due
 - Updated the applications to allow users to extend short-term payment plans to 180 days.
 - Updated application user fee for Installment Agreements.
- Google Analytics
 - Completed migration from Google Analytics GA3 to GA4.
- SADI
 - Migrated applications (OPA, IPPIN and Get Transcript) from eAuthentication to SADI allowing for a more secure experience for taxpayers.
- Implement infrastructure currency updates
 - Currently upgrading to JBoss 8 and MQ 9. Planned completion by end of FY22.
 - Currently upgrading to Oracle 19c and EXADATA. Planned completion by the end of FY22.

WMR and IRS2Go

• Updated applications to provide refund status for two additional tax years.

FY 2023 Future Objectives:

- Continual maintenance of all telephone, web, cloud, and mobile applications as requested by business partners throughout the agency.
- FA-DDX
 - Deliver updates of the API and support the Department of Education integration testing and prepare to go live in 2023.
- Implement multilingual support for web applications.

- Update refund status applications (WMR, IRS2Go and Refund Inquiry) to provide additional statuses.
- ACI
 - ICCE will continue to update remaining telephone-based applications to utilize Voice Bots in a joint effort with UNS/CCSD.
- Improve audit logging by utilizing Splunk and moving away from Security Audit and Analysis System.
- Resolve Plan of Action and Miscellaneous weaknesses for filing season.
- Modernize ICCE applications and migrate to Cloud.
- Migrate ICCE applications from Internet Protocol version 4 (IPv4) to IPv6.
- Migrate Cron jobs to Control-M (CRON is a process where the system automatically generates all output files during off work hours.).

Integrated Data Retrieval System (IDRS)

Description:

Since 1973, IDRS has been a mission critical system. Used by 60,000 IRS employees, it provides for systemic review, consistency in case control, alleviates staffing needs, issues notices to taxpayers, and allows taxpayers to see status of refunds. IDRS is one of Treasury's High Value Assets (HVAs) for its critical role in tax administration. It manages data retrieved from the Tax Master Files, allowing IRS employees to take specific actions on taxpayer account issues, track status, and post updates back to the Master Files. It provides for systemic review of case status, alleviating staffing needs and providing consistency in case control.

Actions taken via IDRS include notice issuance, installment agreement processing, offers in compromise, adjustment processing, penalty and interest computations and explanations, credit and debit transfers within an account or other related accounts, and research of taxpayer accounts for problem resolution of taxpayer inquiries.

Investment Obligations:

Туре	FY 2021 Actuals	FY 2022 Estimated Obligations	FY 2023 President's Budget (Estimated Obligations)	\$ Change	% Change
Sub-Total DME Obligations (Including Internal labor (Govt. FTE))	0.41	0.00	0.00	0.00	0.00%
Sub-Total O&M Obligations (Including Internal Labor (Govt. FTE))	14.94	16.58	16.09	-0.50	-2.99%
Total Obligations	15.35	16.58	16.09	-0.50	-2.99%

Purpose, Accomplishments, Future Objectives:

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 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; and 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, in 2021, there were over 632 million inquiries via Where's-my-refund at www.IRS.gov and over seven million business taxpayers obtain Employer Identification Numbers through www.IRS.gov instead of paper correspondence annually.

IDRS enables businesses that provide payroll services to submit tax data on behalf of millions of taxpayers. It also 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. IDRS produces a variety of tax information that facilitates collaboration with various internal and external partners, including Social Security Administration, Bureau of the Fiscal Service, state and local governments, and tax practitioners.

IDRS is continuously monitored for cost, schedule, and project performance. IDRS's taxpayer-centered services ensure consistent, efficient service, and helps address various performance gaps.

FY 2021 Accomplishments:

- Added Interest and Failure to Pay detail tables to our Taxpayer Delinquent Accounts (TDA) Balance Due and Installment Agreements (IA) Reminder and Default notice records to be printed on the physical notice. There were 12 notice records impacted. The data is now passed from the Common Penalty and Interest (P&I) routines through the TDA Analysis and TDA Balance Due Notice program string. It is not yet passed from Unisys to Notice Print Processing on IBM.
- Notice Print Processing (NPP) and Notice Conversion (NOTCON) are currently being worked to make changes to the Installment Agreement Accounts Listing analysis to remove unnecessary information that was slowing case resolution.
- Began charging a different IA User Fee amount for agreements established through OPA in 2022.
- Implemented new Command Code (CC) FRM77 functionality for Bipartisan Budget Act (BBA) to allow partnerships to be linked to an account owner.
- Implemented updated CC FRM77 functionality for input of Limited English Proficiency (LEP) Alternative Media Preference (AMP) on taxpayer accounts.
- Implemented updated CC FRM77 functionality that will allow the Coronavirus Aid, Relief, and Economic Security (CARES) Act refundable business credits to adhere to Identity Theft (IDT) criteria.

- Added functionality to receive Alternative Media Indicator (AMI) for National Federation of the Blind (NFB) programming mandates for Correspondex letters (CRX).
- Populated Penalty and Interest Tables for TDA, Automated Collections System (ACS), and Automated Lien System (ALS) notices.
- Updated CC IAGRE to calculate the current balance due on modules in an installment agreement.
- Updated Standardized IDRS Access (SIA) functionality to return Taxpayer Information File (Database), TIF-06 (Responsible Party), data to requesting applications.
- Updated Insolvency Interface Program (IIP)/Automated Discharge System (ADS) mirroring processing to reduce unpostable transactions and error reports.
- Updated CC FRM77 to have ability to mark accounts where soft letters have been issued to the taxpayer.
- Updated CC FRM77 employee group restrictions for ID Theft transactions.
- Implemented new CC FRM77 functionality for BBA to allow partnerships to be linked to an account owner.

FY 2022 and FY 2023 Future Objectives:

IDRS is a "lights on" program meaning that only legislative or executive mandate work may be done. With that in mind, the work for FY 2023 and the remainder of FY 2022 includes:

- Populate Penalty and Interest Tables for TDA, ACS, and ALS notices.
- Update installment agreement programming to calculate the current balance due on modules in an installment agreement.
- Update installment agreement programming to create a file of user fees for certain types.
- TDA programming around innocent spouse changes.
- Programming to save taxpayer dollars related to undeliverable mail.
- Programming to support Spanish Notices related to LEP.
- Inflation Adjustments for FS 2022 under Public Law 113-295, Provision 208 that "certain penalties are adjusted for inflation."
- Interest rate changes requiring an update to program code.

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. In addition, it provides functionality supporting the management and administration of the federal acquisition/ procurement processes.

Investment Obligations:

Туре	FY 2021 Actuals	FY 2022 Estimated Obligations	FY 2023 President's Budget (Estimated Obligations)	\$ Change	% Change
Sub-Total DME Obligations (Including Internal labor (Govt. FTE))	5.33	0.00	0.00	0.00	0.00%
Sub-Total O&M Obligations (Including Internal Labor (Govt. FTE))	12.28	4.40	4.37	-0.04	-0.81%
Total Obligations	17.61	4.40	4.37	-0.04	-0.81%

Purpose, Accomplishments, Future Objectives:

Integrated Financial System (IFS) is the core financial system for IRS. By leveraging a Federal version of Software Application and Products in Data Processing (SAP) Commercial Off the Shelf (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 for accountants, budget analysts, and financial management analysts to effectively manage U.S. Government finances for the IRS and respond to audit requests in support of a clean audit opinion.
- IFS allows the IRS to pay bills on time, while meeting Federal financial regulatory requirements.

FY 2021 Accomplishments:

- IFS completed standard maintenance patches, year-end close, and addressed all GAO findings.
- Deployed monthly releases for defect corrections and service requests as requested and prioritized by the customer (CFO/Procurement).

FY 2022 Accomplishments:

- IFS completed changes to support ongoing Federal Financial System mandates. IFS is a Federal version of SAP COTS software, which includes Procurement for Public Sector (PPS).
- IFS completed standard maintenance patches, year-end close, and addressed all GAO findings.
- Deployed monthly releases for defect corrections and service requests as requested and prioritized by the customer (CFO/Procurement).
- Completed functional changes for legislative manded changes related to Dun and Bradstreet Universal Numbering System (DUNS) number replacement.
- IFS initiated an effort to move our application to the next level of SAP architecture from the current version ERP Central Component (ECC) to High Performance Analytical Appliance

(HANA) S/4. In FY 2022, the project will begin the migration of the current IFS SAP applications to SAP HANA Infrastructure in a cloud Environment. The overall migration effort will take two (2) years to complete.

- IFS completed the implementation of Red Hat Enterprise Linux (RHEL7).
- IFS completed the migration of all databases to Oracle 19c.

FY 2023 Future Objectives:

- IFS will complete the Legislative mandated interface with Treasury's G-Invoicing system.
- IFS will complete an effort to move our application to the next level of SAP architecture from the current version ECC to HANA on the cloud.
- Continued the Legislative mandated interface development with Treasury's G-Invoicing system. With an implementation date of October 2022, IFS is developing a new interface for this effort.

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. ISRP is in the operations and maintenance phase of its lifecycle. As result, ISRP continuously provides support to IMF and BMF and performs annual maintenance that includes ddeploying security patches, maintenance updates and firmware updates.

Investment Obligations:

Туре	FY 2021 Actuals	FY 2022 Estimated Obligations	FY 2023 President's Budget (Estimated Obligations)	\$ Change	% Change
Sub-Total DME Obligations (Including Internal labor (Govt. FTE))	0.56	0.00	0.00	0.00	0.00%
Sub-Total O&M Obligations (Including Internal Labor (Govt. FTE))	9.69	6.03	6.03	0.00	-0.05%
Total Obligations	10.25	6.03	6.03	0.00	-0.05%

Purpose, Accomplishments, Future Objectives:

The ISRP 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).

FY 2021 Accomplishments:

- Delivered legislatively mandated Taxpayer First Act Changes to keep ISRP up-to-date.
- Delivered updates to the ISRP system for completing the cleanup from the Tax Reform Act Changes.
- Continued 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.
- Mitigated of the ISRP Program Requirements Package (PRP) documents currently in Microsoft Word format to the Rational Requirements Composer (RRC) system.
- Refreshed the remittance transport infrastructure including the implementation of Electronic Check handling.
- Submission Processing Consolidation: Prepared for the closing of the Fresno site in 2021.
- Completed the refresh of ISRP server infrastructure.

FY 2022 Accomplishments and Future Objectives:

- Delivered updates to the ISRP system for completing the clean-up from the Tax Reform Act Changes.
- Continued 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.
- Continued migration of the ISRP Program Requirements Package (PRP) documents currently in Microsoft Word format to the Rational Requirements Composer (RRC) system.
- Refreshed the remittance transport infrastructure including the implementation of Electronic Check handling.
- Submission Processing Consolidation: Completed closure of the Fresno site.
- Completed the refresh of ISRP server infrastructure.

FY 2023 Future Objectives:

- Continue to send FATCA information (Forms 8938, 8966 and 1042-S (Recipient Copy) to the ICMM system.
- Deliver legislative mandates to remove the display of Social Security Numbers by using 2D barcode scanning capability for processing of notice vouchers.

IRS End User Systems and Services (EUSS)

Description:

The EUSS standard investment provides user-centered information technology (IT) products and services for 90,000 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 required by Federal Information Technology Acquisition Reform Act (FITARA). As such, this investment is essential to providing the IRS with reliable, secure, innovative, and cost-effective technology and services that enable communication, collaboration, and business capabilities.

Investment Obligations:

Туре	FY 2021 Actuals	FY 2022 Estimated Obligations	FY 2023 President's Budget (Estimated Obligations)	\$ Change	% Change
Sub-Total DME Obligations (Including Internal labor (Govt. FTE))	122.33	10.98	8.25	-2.72	-24.81%
Sub-Total O&M Obligations (Including Internal Labor (Govt. FTE))	188.17	259.73	277.29	17.56	6.76%
Total Obligations	310.50	270.70	285.54	14.84	5.48%

Purpose, Accomplishments, Future Objectives:

The purpose of the EUSS investment is to provide secure, reliable, innovative, and cost-effective IT computer hardware, software, services, and support for IRS employees in delivering the IRS's tax administration mission. The goal of the EUSS investment is to ensure that the IRS maintains a secure, stable, and innovative computing environment workplace that provides employees with state-of-the-industry computing devices, applications, security defenses, business tools, and associated end user services to maximize uptime and productivity, while providing compliance with both National Institute of Standards and Technology (NIST) and Defense Information Systems Agency (DISA) security requirements.

Additionally, the EUSS investment facilitates delivery of user focused IT projects and initiatives that enable communication, collaboration, and business capabilities in alignment with the IRS's Integrated Modernization Plan. The User and Network Services (UNS) organization is responsible and accountable for executing the EUSS investment on behalf of the Chief Information Officer.

In FY 2021, UNS facilitated achievement of both IT and IRS future state visions by delivering innovative workplace computing technologies, productivity enhancing tools, proactive education, and support services, to drive a transformative culture of self-service, while simultaneously enhancing the customer experience by:

- Creating over 287 software (SW) deployment packages, equating to 8.7 million individual deployments to workstations (WS) with a 99 percent success rate and minimal issues. Efforts to reduce the Tier 3 COTS software portfolio and upgrade end-of-life software versions substantially contributed to achieving an overall aged software currency goal of 18 percent.
- Beginning to migrate our computer data at rest encryption software and our software deployment platform from Symantec/Broadcom products to Microsoft Endpoint Configuration Manager included in our Workstation Enterprise License. This migration, to be completed by the end of 2022, is expected to provide future reduction of IT Operations and Maintenance (O&M) overhead, budget, and technical debt by reducing redundant capabilities.
- Refreshed/upgraded 893 new high-end performance Windows 10 WS for AT users between January and May 2021 to standardize on a hardware platform and to improve COTS and Government off the Shelf (GOTS) SW performance.

FY 2021-2022 Accomplishments:

• Provided 8,033 IRS workstations to newly hired employees who onboarded during FY 2022. In addition, Operation Service Support provided 6,053 peripherals (monitor, bags, printers) for new hires.

- Replaced 15,000 aged workstations, bringing FY 2022 down to less than 11 percent aged infrastructure for workstations.
- An additional 1,800 hardware items (including printers, cables etc.) were provided since August 2021 to support telework due to COVID-19.
- Implemented new IT Asset Management capabilities to improve IT Asset Data Accuracy and support of the Zero Trust Implementation Plan.
- Implemented General Support System (GSS) Boundary Inventory Dashboards and Reporting as well as a Data Quality Dashboard for use in improving data quality in IRS's Asset Management Inventory Database (Knowledge Incident Problem Service Asset Management (KISAM) Asset Manager).
- Interfaced Criminal Investigation's and cyber's Big Fix instances with KISAM Asset Manager.
- Completed the process for tracking virtual workstations in the Asset Manager inventory tool.
- Addressed Assistive Technology (AT) users experience and IT services and support enterprise wide.

FY 2022-2023 Future Goals and Objectives:

- Efforts are underway to use Robotics Process Automation to implement a Robotic Asset Mover in FY 2022 to optimize IT Asset move transactions, reduce manual processing time, and improve accuracy and transactional currency.
- Assess feasibility of Desktop-as-a-Service cloud-based Virtual Desktop Infrastructure (VDI) solutions.
- Continue maturity of IT Asset Management process improvement, including transition to PC Lifecycle Management, a managed service contract.
- Continue production deployment of Treasury managed print service.
- Ensure mandated changes are implemented to provide updated desktop services and support for all end user technologies at the IRS.

IRS 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:

Туре	FY 2021 Actuals	FY 2022 Estimated Obligations	FY 2023 President's Budget (Estimated Obligations)	\$ Change	% Change
Sub-Total DME Obligations (Including Internal labor (Govt. FTE))	87.62	89.60	70.21	-19.39	-21.64%
Sub-Total O&M Obligations (Including Internal Labor (Govt. FTE))	570.19	585.54	585.77	0.23	0.04%
Total Obligations	657.81	675.14	655.99	-19.16	-2.84%

Purpose, Accomplishments, Future Objectives:

The MSSS investment represents the operational investment for the deployment of server, middleware, and large systems. It also includes the enterprise storage infrastructure, including systems software products, databases, and operating systems for these platforms. MSSS resources are primarily used to support the operations and maintenance of the vast array of infrastructure necessary to support tax administration. MSSS represents roughly 25 percent of the IRS's total IT budget.

The primary objective of the MSSS investment is to ensure the continuity of IT operations, support, and maintenance for all Tier I (Enterprise Servers) and Tier II (Servers, Middleware, Storage, Databases) production systems responsible for the daily operations of IRS batch and online processing. In addition, all supporting environments that make up application development and deployment pipelines must be maintained, patched, secured, and available for over 400 processing applications.

This investment shall ensure timely tax processing and refund issuance to millions of taxpayers and businesses. MSSS TIER I Infrastructure costs support submission processing and the upgrading of Enterprise mainframes to handle over 10,000 MIPS (Millions of Instructions Per Second) thus increasing capacity to handle peak transactions. MSSS TIER II Infrastructure costs also support submission processing and critical IRS processes such as: collections, criminal investigations, processing individual tax returns and processing paper and electronic taxpayer payments as well as various internal IRS business applications. The MSSS non-tier specific costs support critical IRS processes and infrastructure that could occur. This cost is required to ensure all infrastructure related to supporting filing season and submission processing is available for tax customers without disruption.

FY 2021 Accomplishments:

MSSS investment continues to deliver a successful filing season through the efficient management and maintenance of infrastructure operations for FY 2021. Accomplishments in FY 2021 include:

- M365 Modernization Program transitioned mailboxes on a server to the cloud and leveraged a full suite of Microsoft services including Teams, SharePoint Online, OneDrive for Business, and Project Online.
- Automated the patching process for 25 percent of premium service list applications.
- Implemented containers to allow easier IT application deployment.
- Virtual Infrastructure Reclamation Project has unlocked over 382 gigabytes (GB) of virtual central processing unit (vCPU) cores and 802 GB of virtual Random-access memory (RAM). It

has enhanced the customer experience and avoided almost \$3 million in Capital Expenditure (Capex) IT investments.

- Processed three rounds of Economic Impact Payments, while processing filing season 2020 tax returns. The IRS also had to coordinate changes needed to support the new filing season deadline and new tax credits established under the American Rescue Plan.
- Linux Operating System Migration upgraded 1,200 servers from RHEL 6.x to RHEL 7.x to strengthen data security controls within the IRS and substantially reduce the risk of unauthorized exposure of taxpayer and IRS employees' sensitive information. The upgrade to RHEL7.x will make them more interoperable and compatible within the IRS and with other Federal agencies.
- Active Directory Federated Services benefits allowed for projects to comply with Homeland Security Presidential Direction (HSPD)-12 mandates by allowing PIV access to applications. It provided savings by purchasing hardware instead of using cloud resources. It also provided the ability to acquire resources on a just in time basis and provide High Availability failover.
- Linux Enterprise Server Refresh Replaced the two existing IBM z13 mainframes, adding slightly more capacity to support the growth of Modernized eFile (MeF) and any projects committed to migrate from Oracle/Solaris to Enterprise zLINUX in the near future.
- Provided sufficient processing capacity to handle filing season 2022 workloads for mission critical applications such as MeF, Totally Automated Personnel System/Single Entry Time Reporting, and Counsel Automated Systems Environment Management Information System.
- Provided sufficient processing capacity for any other Oracle/Solaris workloads committed to migrating to IBM zLINUX.
- Automated build functions by moving to standard stack components and using virtual servers. Additionally, MSSS successfully zeroed out a backlog of more than 400 requests for virtual servers, including requests for high-profile initiatives supporting the SADI initiative and the Advanced Child Tax Credit (ACTC). Funded and authorized requests for virtual servers are now ordered through an automated portal and delivered within 14 days on average upon approval of the request. Also, time is saved by conducting reviews with all stakeholders at once after a request is entered. On average, approximately 2,500 servers are requested each year to support IRS business units in meeting compute and data storage needs. With the push to standard stack, even high priority projects with extremely short timeframes such as SADI and ACTC can be fulfilled within two to three days, when needed. We can better serve taxpayers, while maintaining a standardized and secure portfolio of servers that reduce overhead and support costs.
- Streamlined the Enterprise Case Management case and workload management processes to improve how the IRS serves taxpayers, businesses, tax-exempt organizations, and others. Delivered ECM Release 1, which is a new secure, cloud-based platform that allows Tax Exempt/Government Entities to access the data they need to provide a seamless and satisfactory customer service experience.

FY 2022/2023 Future Objectives:

- Increase focus on enterprise strategic goals, new technologies, increased capabilities and service models to improve overall performance and support.
- Windows (WIN) OS Migration, a multi-year effort to upgrade/migrate outdated Windows Operating Systems to WIN OS 2019 and the Structured Query Language (SQL) 2019. Win OS will upgrade/migrate servers to ensure a secure and supportable Enterprise Windows/SQL Server environment in support of Infrastructure Currency. Replace physical servers with virtual

servers where possible to aid in the retirement of aged assets. Expecting to complete upgrade of approximately 1,700 servers.

- Mail Inserter Replacement Replacement of four mail inserters in both the Detroit and Ogden sites. Refreshing this equipment will increase taxpayer notice productivity with fewer mechanical equipment breakdowns and mitigate decreasing availability of repair parts.
- Refresh the Unisys Dorado 8590. –When this is complete, the IRS will have access to premium vendor support of the Dorado 8590 hardware for five years, bringing stability to this key component in tax processing.
- Refresh the current Disk Library mainframe (DLm) 8100s with updated DLm 8500s to increase the availability and performance of the platform for the IRS's critical applications. The IRS will have access to premium vendor support of the Dell EMC DLm hardware for five years, bringing stability to this key component in tax processing.

IRS Telecommunications Systems and Support (TSS)

Description:

The 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, 90,000 employees, and over 162 million taxpayer calls annually. As such, this investment is essential to providing the IRS with reliable, secure, innovative, cost-effective technology and services that enable communication, collaboration, and business capabilities.

Туре	FY 2021 Actuals	FY 2022 Estimated Obligations	FY 2023 President's Budget (Estimated Obligations)	\$ Change	% Change
Sub-Total DME Obligations (Including Internal labor (Govt. FTE))	79.94	19.67	18.41	-1.26	-6.40%
Sub-Total O&M Obligations (Including Internal Labor (Govt. FTE))	348.34	275.36	350.32	74.96	27.22%
Total Obligations	428.28	295.03	368.74	73.70	24.98%

Investment Obligations:

Purpose, Accomplishments, Future Objectives:

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's 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. Also, User and Network Services (UNS) provides initiatives that are IT modernization centric and support the IRS IT Modernization plan.

The impact of the TSS investment is the facilitation of the IRS's future state vision and IT agility by delivering innovative next generation technology and providing 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 tax responsibilities and enforcing the law with integrity and fairness.

FY 2021/2022 Accomplishments:

- Provided over 1,400 Wi-Fi hotspots to employees on Weather and Safety leave due to COVID-19 site closures, providing a means to return staff to productive work and will continue to provide support to employees as they continue the return to the office.
- Expanded system capacity and rebalanced Unity Voicemail system to support integration with Exchange Online, as part of Teams migration.
- Updated the network appliance Open Network Technology for Appliance Products (ONTAP) system version in support of Call Manager (CM) infrastructure.
- Replaced 6,500 obsolete phones with newer models to address security vulnerabilities.
- Completed a major version update to Cisco WebEx Meeting Server and WebEx clients (to v4).
- Consolidated Category 1 sites' CM clusters into fewer total servers, creating system and hardware efficiencies.
- Completed CM and Unity voicemail maintenance updates to address security vulnerabilities.
- Updated system wide patching of CM, Unity voicemail, WebEx, and Cisco Emergency Responder to mitigate Log4J vulnerability.
- Delivered Enterprise Infrastructure Solutions (EIS) Local Service Agreement (LSA) Local Provider (LP) (i.e., analog lines, private lines, Integrated Services Digital Network, Primary Rate/Basic Rate Interface and long-distance service).
- Delivered Toll Free Contact Center (CC) EIS.
- Transitioned 95 percent of toll-free numbers from Networx to EIS utilizing Back Office Transition. By December 2022, the transition of remaining numbers will be planned.
- Developed design, implemented solution and successfully completed functionality of Internet Protocol (IP) Transport in lab environment. Transition of 31 call sites was completed in December 2021.
- Refreshed core server hardware infrastructure that supports CM and Unity voicemail at four core locations.
- Upgraded Jabber softphone client and CM instances to maintain infrastructure currency.
- Consolidated and reduced the number of voice gateway routers and CM server HW at large Cat1 sites.
- Expanded the Customer Callback solution by adding four taxpayer-facing applications (app) for a total of five and upgraded the Ogden primary circuit to 10G.
- Deployed Quality of Service to all Posts of Duty (PODs) to control and managed network resources.
- Updated all network devices to adhere to the password minimum length requirement.
- Rolled out Internet Protocol version 6 (IPV6) to Enterprise Remote Access Project. All users connecting to the IRS network via VPN are now receiving IPV6 addressing.
- Implemented Data Center (DC) SW Defined Networking and Cisco App Centric Infrastructure at both DCs and migrated critical apps (i.e., Exchange and Skype).
- Completed Unified Access Enforcement Mode to all IRS and CI PODs.

- Completed Segmentation of first HVA IMF.
- Deployed Aternity client to all workstations to monitor, analyze and improve IRS user experiences.
- Upgraded Unified CC Enterprise Parent & Child IUP-ER app to Cisco IOS 11.6.
- Retired end-of-support HW/SW to meet N/N-1 compliance standard and prepared for future technology upgrades.
- The COVID-19 pandemic increased IRS's telework capabilities from roughly 40,000 to over 73,000 users and is currently being maintained.
- Provided infrastructure to support 56,100 concurrent IRS online users.
- Provided CC infrastructure and systems to support over 74.4 million IRS call center calls and over 1.46 million EIP calls.
- Implemented EIP Integrated Voice Response via cloud to handle stimulus payment calls and stood up external CC.
- Sent 500+ emergency alerts to 90,000 IRS employees' desktops and mobile devices via AtHoc.

FY 2022-2023 Goals/Objectives:

- Complete a hardware refresh of the eight session border controller routers supporting the enterprise Session Initiation Protocol (SIP) trunks for calls in and out of the enterprise.
- Complete major version updates to VMware virtualization layer supporting CM, Emergency Responder, and Unity (to v7).
- Decommission Cisco WebEx on premises infrastructure.
- Release the Mobile Remote access functionality for use of Government issued and Bring Your Own Device mobile phones to place and receive calls via the CM infrastructure.
- Undergo major version update to Cisco Jabber softphone client (to v14).
- Complete major version update to Cisco ViewMail for Outlook client (to v12.5).
- Update operating system to Single Sign On authentication servers and Lightweight Directory Server web administration servers supporting the CM and Unity infrastructure.
- In process of migrating users' desktops from Computer Telephony Integration Object Server to Finesse for W&I and SBSE users.
- Upgrade Contact Center CM and Unity voicemail from v10.5 to version 12.5.
- Add taxpayer applications to the existing Call Back Solution for Filing Season 2022 for a total of 31 applications.
- Deploy Contact Recording and Contact Analytics infrastructure at Martinsburg and Memphis to increase capacity to support FY 2022 New Hire Initiative.
- Upgrade SIP Stack capacity in Ogden by December 2022.
- Migrate End-of-Life/End-of-Support Interactive Tax Law Assistant and Interactive Tax Assistant applications from an on-prem to Oracle SaaS Cloud by February 15, 2023.
- Deploy Assisted Intelligence Voice Response Natural Language Processing (NLP) technology in Spanish for taxpayers to assist taxpayers.
- Convert the existing eight Interactive Voice Response to conversational phone applications using NLP and a cloud-based solution.
- Implement a single-authentication criterion for all phone applications.

• Implement VoiceBots and ChatBots to answer generic FAQs by taxpayers regarding one-time payment and notice clarification.

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 24/7 service to taxpayers at their convenience. It has facilitated 4.656 billion-page views and 3.303 billion downloads in FY 2021.

Investment Obligations:

Туре	FY 2021 Actuals	FY 2022 Estimated Obligations	FY 2023 President's Budget (Estimated Obligations)	\$ Change	% Change
Sub-Total DME Obligations (Including Internal labor (Govt. FTE))	10.34	3.10	8.13	5.04	162.65%
Sub-Total O&M Obligations (Including Internal Labor (Govt. FTE))	74.23	93.77	82.12	-11.64	-12.42%
Total Obligations	84.56	96.86	90.26	-6.61	-6.82%

Purpose, Accomplishments, Future Objectives:

The mission at the IRS is to provide America's taxpayers top-quality services by helping them understand and meet their tax responsibilities, and enforce U.S. tax law, with integrity and fairness to all. The IRS portal environment supports the IRS mission by providing a virtual tax assistance center for internal and external users. IRS.gov remains a cost-efficient platform to rapidly deploy standardized customer-facing solutions. During the COVID-19 pandemic, the portal's ability to provide remote access to taxpayers, business partners, and employees was invaluable to the continuity of U.S. tax administration since standard face to face methods increased risk to taxpayers and IRS employees. The portal continues to be invaluable. During the 2020 and 2021 filing seasons, the portal was instrumental in the administration of the EIPs to American taxpayers by providing remote access to applications like Get My Payment (GMP), the COVID-19 screening application, and Modernized Electronic filing (MeF).

The portals continue to support rapid application deployments that are secure and fully capable to meet taxpayer needs. New evolving applications, like Document Upload Tool and Advance Childcare Tax Credit, align the IRS with the changing needs of taxpayers by providing them with a more accessible, faster, and more secure digital presence. IRS.gov continues to improve in its ability to provide better tools by supporting rapid deployment solutions, utilizing cloud technologies to quickly acquire secure storage and application platforms, and providing more robust user interfaces, faster communications, and improved security measures.

Integrated Enterprise Portal (IEP) supports a robust innovation effort, which is intended to bring IRS innovators together to use technology, improve the way IRS works, and provide services to the public. The innovation teams have completed more than ten proofs-of-concept in various innovation waves. One innovation wave introduced automated pipeline tools like Jenkins and Selenium for managing the Public

User Portal (PUP). The team is continuing to develop new and progressive efforts, such as the Automated Error Response via Self-Healing Agents innovation project, which will allow the use of AI operations tools to create automated responses and reduce the time taken to dissect and triage incidents for lower-level incident tickets. The Cloud Server Provisioning innovation project will provide IT executives and technologists with the ability to monitor cloud-native and on-premise resources quickly and to identify optimal usage of resources and potential cost.

FY 2021/FY2022 Accomplishments include:

- Rapid deployment of GMP I, II and III supporting EIP during the COVID-19 pandemic.
- Enhanced reporting and analytics providing enterprise visualizations with Splunk IT Service Intelligence dashboards for IEP operations.
- Improved the performance and reliability and IRS connectivity of Software Defined Wide Area Network (WAN) technologies through WAN IEP.
- Designed the Tax Withholding Estimator tool for the 2021 Tax Reform legislation changes.
- Completed Web Content Management System (WCMS) operations and content updates for current filing season and second year tax reform changes.
- Finished annual filing season prep activities for all portals: PUP (IRS.gov), Registered User Portal (RUP), EUP, and Transactional Processing Environment.
- Completed ACA activities in prep for Open Enrollment and supported ACA through the portal.
- Provided on-going Web Apps releases support.
- Supported required activities for the following IRS Initiatives:
 - Martinsburg Failover to Memphis
 - Memorial Day Martinsburg Power Down/Up
 - Disaster Recovery Exercises
- Continued support of Political Organization Filing and Disclosure.
- Increased capacity, performance testing, and integration support for expected tax reform demand.
- Supported application updates and identified needed infrastructure upgrades.
- Planned for Filing Season 22 activities across all portals.
- Supported ongoing Tax Reform updates for content and applications.
- Replaced non-compliant software and reduced single point of failure for portal account management through the Enterprise Operations Portal Accounts Replacement Tool investment.
- Consolidated and refreshed the Enterprise Informatica Platform within the Informatica tool for continued operability.
- Supported increases in portal activity based on historical growth trends and the public's increased reliance on digital transactions.
- Expanded ongoing Bitmap implementation support (active protection) for public facing apps.
- Completed the Advanced Child Tax Credit Update Portal.

Future FY 2022/FY 2023 objectives:

- Incorporate MarkLogic enterprise database system
- Implement Document Upload Tool
- Upgrade ECM Red Hat Enterprise License (RHEL) to version 8

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 for its critical role in tax administration.

Investment Obligations:

Туре	FY 2021 Actuals	FY 2022 Estimated Obligations	FY 2023 President's Budget (Estimated Obligations)	\$ Change	% Change
Sub-Total DME Obligations (Including Internal labor (Govt. FTE))	17.25	7.36	11.69	4.33	58.75%
Sub-Total O&M Obligations (Including Internal Labor (Govt. FTE))	48.87	47.90	47.89	-0.01	-0.02%
Total Obligations	66.12	55.26	59.58	4.31	7.81%

Purpose, Accomplishments, Future Objectives:

The 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 the primary system for electronic filing of business and individual tax returns and forms.

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. This reduces the handling/mailing of voluminous paper returns. MeF has dependencies with:

- IRS.gov Portal Environment
- Information Return and Document Matching
- Generalized Mainline Framework
- Return Review Program
- ACA Verification Service
- Individual Master File
- Business Master File
- Tax Return Data Base
- Electronic Fraud Detection System

Accomplishments and Future Objectives:

FY 2021 Accomplishments:

- Deployed MeF Release 10.4, which will allow maintenance of MeF and includes hardware, software, security, helpdesk, training, etc.
- Developed MeF Release 10.5, which will allow maintenance of MeF and includes hardware, software, security, helpdesk, training, etc.

FY 2022-2023 Accomplishments and Future Objectives:

- Delivery of legislative changes to support the American taxpayers and those impacted by the COVID-19 pandemic. This includes:
 - \circ ARP changes for 1040/1041/94X.
 - Sunsetting of Employee Retention Tax Credit (ERTC) for 94X through the Infrastructure Investment and Jobs Act.
 - Form 1120S Schedule K-2 and Schedule K-3.
 - Taxpayer First Act: Form 5330.
 - Successful demonstration of Digitalization of 1040 forms to help reduce paper backlog.
- Deploy MeF Release 10.5, which will allow maintenance of MeF including hardware, software, security, helpdesk, training, etc.
- Develop new MeF Release for Filing Season 2023, which will allow maintenance of MeF that includes hardware, software, security, helpdesk, training, etc. and implementation of Lockbox Digitalization of 940s to reduce processing of paper.
- Deploy MeF Release 10.6, which will allow maintenance of MeF that includes hardware, software, security, helpdesk, training, etc. and implementation of Lockbox Digitalization of Forms 940 to reduce processing of paper.

Modernized IRS Operations

Description:

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:

Туре	FY 2021 Actuals	FY 2022 Estimated Obligations	FY 2023 President's Budget (Estimated Obligations)	\$ Change	% Change
Sub-Total DME Obligations (Including Internal labor (Govt. FTE))	22.84	24.81	24.71	-0.11	-0.43%
Sub-Total O&M Obligations (Including Internal Labor (Govt. FTE))	0.00	0.00	0.00	0.00	0.00%
Total Obligations	22.84	24.81	24.71	-0.11	-0.43%

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.
- Deploy software more quickly through automating delivery and infrastructure provisioning.
- Create standard, reusable services and common application programming interface (API) code, reducing duplicative/ "recreate" work for IRS employees, improve operational efficiency, and reduce licensed cost, shared services' platforms.
- More efficient, scalable, resilient, and secure infrastructure.

Modernized IRS Operations seeks to:

- 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.

IRS has made significant investments in the Massive Parallel Processing (MPP). Greenplum is a purposebuilt appliance which integrates database, compute, storage and network for MPP. Greenplum is a Data Computing Appliance that provides cutting edge technologies supporting IRS critical filing season systems such as Return Review Program, Integrated Production Model, CADE 2, and ACA. The IRS is moving toward the Target State architecture by modernizing its business applications and adopting emerging technologies such as cloud, data analytics, DevOps automation, and leveraging APIs for reusable enterprisewide services. These initiatives and ongoing development efforts as described in the Target Enterprise Architecture will help IRS to progressively deliver new capabilities and enhancements to the taxpayer and improved operations across all major business and technical areas

FY 21 Accomplishments:

The following capabilities deployed in FY 2021:

- API
 - o Defined External API Product Architecture and Standards
 - Cloud Execution
 - o Cloud Roadmap
 - Expanded Cloud Target Reference Model
 - Enterprise Container Platform on Cloud
 - Cloud Workforce and Operating Model

FY 2022 Objectives:

The following capabilities are scheduled to deploy in FY 2022:

- API
 - Enable Enterprise API Deployment and Management

- Cloud Execution
 - External Gateway Service
 - o Cloud Cybersecurity Enhancements
 - Multi-Cloud Environment and Core Services
- Digitalization
 - Define Taxpayer Experience Target State Architecture Phase 2
- Enterprise Data Platform
 - Ready for Batch Data Ingest
 - Change Data Capture
 - Universal Data Hub
 - Reporting Capability
 - o Metadata Management
 - Individual Support and Account Data
- NGI
 - o Implement Flexible Digital Workspace (Cloud Virtual Desktop Initiative)
 - Develop the Database as a Service Criteria and Platform for IRS Enterprise RPA
 - Revise/update the cloud-based RPA enterprise platform design to accommodate selected tools and products
- RPA
 - Research and review best practices for Intelligence Automation
- Workforce Infrastructure
 - o Create Transformation Roadmap (to include the Vision, Scope, and Architecture)
 - Build out Human Resource Service Delivery (HSRD) initial Capabilities targeting 2-4 Use Cases

FY 2023 Objectives:

The following capabilities are scheduled to deploy in FY 2023:

- Cloud Execution
 - Cloud Migration and Support Services Expansion
 - Self-Service and Automated Provisioning Components
- Digitalization
 - Deliver Scanning Solution with Cloud and ECM Integration
 - Integrate Authenticated Digital Intake Capabilities with the Digitalization System
 - Integrate Unauthenticated Documentation Upload Tool with Digitalization System
 - Initiate E-Fax Digitalization Intake
 - Establish Perfected Data Store for Data Extraction and Document Validation
- IT Service Management (ITSM)
 - Migrate Service Manager (SM)
 - Migrate Configuration Management Database (CMDB)
 - Migrate E-Help Support System (EHSS)
 - Migrate Asset Manager (AM)
 - Retire KISAM (Legacy ITSM Platform)
- Workforce Infrastructure
 - Build out HRSD initial Capabilities, which targets four to eight use cases.

Return Review Program (RRP)

Description:

In late 2016 after the IRS retired the core functionality of Electronic Fraud Detection System, RRP became the primary system used for pre-refund anomaly and fraud detection for individual tax returns claiming refunds, including all identity theft and fraud detection components. RRP uses leading-edge, machine learning technologies to detect, resolve, and prevent criminal and civil tax refund fraud and non-compliance. The IRS will expand the use of RRP to other return types, to further improve the agency's ability to pursue significant areas of tax noncompliance.

RRP is an anomaly detection system that enhances the IRS's capabilities to detect, resolve, and prevent criminal and civil non-compliance (such as identity theft) in tax returns. This reduces issuance of refunds for fraudulent tax returns. RRP sustains operations targeted to deliver business value within the following scope areas: Analytics and Automation, Data Access and Analysis, Addressing Legacy Components, and Infrastructure/Architecture.

Туре	FY 2021 Actuals	EV 2022 Estimated	FY 2023 President's Budget (Estimated Obligations)	\$ Change	% Change
Sub-Total DME Obligations (Including Internal labor (Govt. FTE))	2.73	42.94	42.32	-0.62	-1.45%
Sub-Total O&M Obligations (Including Internal Labor (Govt. FTE))	56.29	71.34	69.92	-1.42	-1.99%
Total Obligations	59.02	114.28	112.24	-2.04	-1.79%

Investment Obligations:

Purpose, Accomplishments, Future Objectives:

Return Review Program (RRP) uses leading-edge machine learning technologies 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 is the anomaly detection platform for the enterprise for 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 the primary line of defense against the perpetration of individual tax return identity theft, fraud, and non-compliance. RRP's primary customers are W&I and CI.

FY 2021 Accomplishments:

- Implemented RRP Filing Season updates for IMF and BMF to address changes to the filters, rules and models.
- Implemented required software and infrastructure updates for the maintenance of the RRP system.

FY 2022 Accomplishments:

- Upgraded to use Selection and Analytical Platform (SNAP). Within four hours of receiving an individual claiming a tax refund, the program applies artificial intelligence to verify income and withholding based on third-party data, generates multiple risk scores using over 1,000 features, assesses if the return falls within a scheme using network analytics, and initiates the appropriate treatment. RRP now detects 95 percent of the systemically detected pre-refund fraud and has achieved a return-on-investment of over 1,500 percent, since the initial investment began in 2015.
- Addressed and applied system updates in response to the ARP updates.
- Implemented updates associated with modernization, development, and delivery filing season validation.
- Implemented updates associated with the Greenplum upgrade.

FY 2022-2023 Objectives:

- Finalize decision on BMF anomaly detection on RRP.
- Expand SNAP anomaly detection for FATCA.
- Process IMF balance due returns.
- Execute RRP models on tier 2 servers (lean business case 159).
- Execute MeF 1040-X.
- Load SADI data.
- Implement anomaly detection and case selection target architecture.
- Execute big data analytics rehosting of Greenplum.
- Implement RRP RHEL8 mitigation plan.
- Update RRP overaged servers.

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. It also converts data to electronic format for processing downstream. SCRIPS is in the operations and maintenance phase of its lifecycle. As result, SCRIPS continuously provides support to IMF and BMF and performs annual maintenance that includes deploying security patches, maintenance updates and firmware updates as well as delivering legislatively mandated tax changes to keep SCRIPS updated.

Investment Obligations:

Туре	FY 2021 Actuals	FY 2022 Estimated Obligations	FY 2023 President's Budget (Estimated Obligations)	\$ Change	% Change
Sub-Total DME Obligations (Including Internal labor (Govt. FTE))	0.81	0.00	0.00	0.00	0.00%
Sub-Total O&M Obligations (Including Internal Labor (Govt. FTE))	9.33	1.77	1.69	-0.08	-4.44%
Total Obligations	10.14	1.77	1.69	-0.08	-4.44%

Purpose, Accomplishments, Future Objectives:

The 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 R), Form 940 (and associated Schedules A and R), and Form 943 Stand-alone Schedule R. SCRIPS processes ACA-IRP Forms 1094-X and 1095-X. SCRIPS also 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 engine and utilizing 2-Dimensional bar code recognition, which optimizes and automates data entry of taxpayer data.

SCRIPS is one of the front-end input systems that operates at three IRS Service Centers, where forms are received, sorted, and sent to the scanning areas. SCRIPS sends the electronic taxpayer data to the IRS downstream tax processing systems, including the Generalized Mainline Framework and Master File for posting to the IRS database, Service-Wide Employment Tax Research System, and Statistics of Income for compliance.

SCRIPS sends data to ACA Information Returns 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. SCRIPS will deliver legislatively mandated Tax Year changes to keep SCRIPS up to date. SCRIPS processed more than 50 million tax forms in 2021. SCRIPS expects to process equivalent volume in 2022. SCRIPS provides taxpayers fair and uniform application of the law and increases efficiency for tax processing by converting paper forms to electronic images.

FY 2022 Accomplishments and 2023 Future Objectives:

- Implemented multisite option process, allowing SCRIPS users to log into any of the three SCRIPS processing sites to work inventory and reduce workload at a targeted site.
- Expand Schedules K-1 core record layout to accommodate expanded fields.
- Begin development to deliver Information Returns (IR) Modernization changes for filing season 2023.
- Support digitalization by incorporating several Integrated Submission and Remittance Processing System (ISRP) forms into the SCRIPS scanning process to remove the dependency on transcribers. SCRIPS will start with IR forms to facilitate the delivery of IR Modernization efforts.
- The refresh of the SCRIPS server's infrastructure is being planned. IRS will leverage functionality between the ISRP and SCRIPS systems to improve efficiency and reduce costs.

Web Applications

Description:

The Web Applications (Web Apps) program and initiatives improve interactions and communications across taxpayers, 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 authorized third parties and taxpayers to interact digitally with the IRS, the investment provides a better user experience and delivers consistent data and services through reusable Application Programming Interfaces (APIs). Web Apps will

continue to transform the way the IRS does business by enhancing the taxpayer experience and delivering new digital services that allow taxpayers and their authorized tax professionals to track, receive, and send information and take actions on their personalized online account.

Туре	FY 2021 Actuals	FY 2022 Estimated Obligations	FY 2023 President's Budget (Estimated Obligations)	\$ Change	% Change
Sub-Total DME Obligations (Including Internal labor (Govt. FTE))	54.75	90.19	134.65	44.46	49.30%
Sub-Total O&M Obligations (Including Internal Labor (Govt. FTE))	9.78	10.14	9.42	-0.72	-7.09%
Total Obligations	64.53	100.33	144.07	43.74	43.60%

Purpose, Accomplishments, Future Objectives:

Web Apps allows IRS to maintain, improve, and expand on the broad range of digital services offered today and enhance the number and types of transactions the taxpayer and their representatives can complete securely using their personal IRS Online Account.

- Continued investment in the program will enable new digital options for self-service and secure information exchanges, including access to fast, secure, and personalized digital communications delivered through a secure messaging platform.
- Web Apps will help ensure a higher-quality customer experience in line with government-wide efforts to deliver what the public expects and deserves in the 21st century.

FY 2021 Accomplishments:

- Web Apps delivered multiple IRS Modernization Plan (Mod Plan) capabilities including a Taxpayer First Act Section 2302 compliant release of Tax Pro Account, enabling tax professionals and taxpayers to electronically sign and submit Power of Attorney and Tax Information Authorization.
- The program delivered additional capabilities for Online Installment Agreement to display eligible payment plan options and pay-off amounts to taxpayers, provide single taxpayers the ability to check their initial eligibility, and set up a short-term payment plan.
- Web Apps also delivered a Taxpayer Payment API capability, enabling taxpayers to view details for electronic payments that are pending and scheduled for future dates without having to leave the application or reauthenticate.

FY 2022-2023 Future Objectives:

• FY 2022, IRS plans to Modernize Online Payment Plans by continuing work towards an FY 2023 release. Web Apps will deliver a capability to enable taxpayers to make a same day balance payment from their bank account within their Online Account known as Integrated Payment. Also, Web Apps will deliver the Tax Pro Account capability, including enhanced user experience, email alerts, and performance improvements. Additionally, Taxpayer Digital Communication - Outbound Notifications will be renamed Digital Notices and Letters.

- FY 2023 release will provide the ability to opt in or opt out of receiving paper notices and receive notifications through email when a notice is available.
- In FY 2022, the Web Apps program will initiate modernization efforts using ARP funding. This includes portal content management, the implementation of content decoupling and multi-lingual languages to enhance the taxpayer experience. Infrastructure Modernization will also migrate Web Apps infrastructure to the cloud to improve agility and to bring products and features to the taxpayers faster, while retaining/enhancing security.

FY 2023, Web Apps will conduct two deployments of Integrated Payment, and modernize online payment plans by delivering the ability to create and manage long-term installment agreements. Also, Tax Pro Account plans to deploy a capability to allow taxpayers to view and manage authorizations and initiate Power of Attorney and Tax Information Authorization requests. Additionally, digital letters and notices will deploy a capability, providing taxpayers with the ability to view and change user preferences for notices within the profile of their online account.

Major Non-IT Investments

Criminal Investigation Owned Vehicles

Description:

The IRS Criminal Investigation (CI) business unit maintains ownership of approximately seventy vehicles that include the Commissioner's protective detail and surveillance type vehicles. CI undercover and international vehicles not reported in Treasury's FAST System due to sensitivity are excluded.

Investment Obligations:

Туре	FY 2021 Actuals	FY 2022 Estimated Obligations	FY 2023 President's Budget (Estimated Obligations)	\$ Change	% Change
Sub-Total DME Obligations (Including Internal labor (Govt. FTE))	0.00	0.00	0.00	0.00	0.00%
Sub-Total O&M Obligations (Including Internal Labor (Govt. FTE))	2.78	2.80	2.80	0.00	0.00%
Total Obligations	2.78	2.80	2.80	0.00	0.00%

Purpose:

The vehicles will be used to support the IRS investigations and must meet the mission critical need to conduct criminal law enforcement activities.

Criminal Investigations Capital Assets

Description:

This investment includes radios and radio maintenance, vehicles owned by Criminal Investigations (CI), body armor, guns, and body plates.

Investment Obligations:

Туре	FY 2021 Actuals	FY 2022 Estimated Obligations	FY 2023 President's Budget (Estimated Obligations)	\$ Change	% Change
Sub-Total DME Obligations (Including Internal labor (Govt. FTE))	0.00	0.00	0.00	0.00	0.00%
Sub-Total O&M Obligations (Including Internal Labor (Govt. FTE))	4.40	5.20	7.70	2.50	48.08%
Total Obligations	4.40	5.20	7.70	2.50	48.08%

Purpose:

These assets are used to protect CI special agents from threats and bodily injury, while performing their law enforcement duties. These duties include conducting investigations concerning alleged criminal tax fraud violations, financial crimes, and other related offenses.

Leasehold Improvements

Description:

Leasehold Improvements, which includes alterations to buildings, fixtures such as elevators, plumbing, power-plant boilers, fire-alarm systems, lighting, heating systems, air-conditioning systems, flooring, and carpeting. In a particular year, the total figure is a sum of the expenditures in that object class for all IRS projects.

Investment Obligations:

Туре	FY 2021 Actual	FY 2022 Estimated Obligations	FY 2023 President's Budget (Estimated Obligations)	\$ Change	% Change
Sub-Total DME Obligations (Including Internal labor (Govt. FTE))	0.00	0.00	0.00	0.00	0.00%
Sub-Total O&M Obligations (Including Internal Labor (Govt. FTE))	36.02	83.48	76.33	-7.14	-8.56%
Total Obligations	36.02	83.48	76.33	-7.14	-8.56%

Purpose:

Many IRS projects undertaken 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 the OMB object class 32.0 (Land and Structures)...

Security Equipment

Description:

Security Equipment, which includes cameras, digital video recorder system (DVRs), access control panels, and card readers, etc. This investment is managed in Facilities Management and Security Services.

Investment Obligations: (In Millions of \$):

Туре	FY 2021 Actuals	FY 2022 Estimated Obligations	FY 2023 President's Budget (Estimated Obligations)	\$ Change	% Change
Sub-Total DME Obligations (Including Internal labor (Govt. FTE))	0.00	0.00	0.00	0.00	0.00%
Sub-Total O&M Obligations (Including Internal Labor (Govt. FTE))	5.38	5.62	5.60	-0.02	-0.34%
Total Obligations	5.38	5.62	5.60	-0.02	-0.34%

Purpose:

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's priority to provide a safe and secure environment for its employees, equipment, and facilities.