FISCAL YEAR 2024
ANNUAL PERFORMANCE REPORT

DEPARTMENT OF COMMERCE · UNITED STATES OF AMERICA
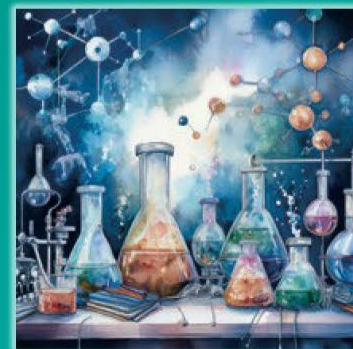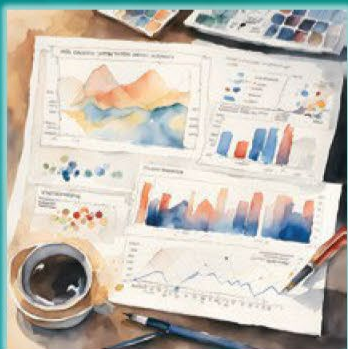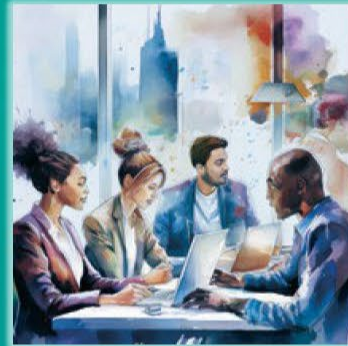
DEPARTMENT AT A GLANCE

HISTORY AND ENABLING LEGISLATION

The Department of Commerce (DOC) was originally established by Congressional Act on February 14, 1903, as Commerce and Labor (32 Stat. 826; 5 U.S.C. 591) and was subsequently renamed the U.S. Department of Commerce by President William H. Taft on March 4, 1913 (15 U.S.C. 1512). The defined role of the new Department was "to foster, promote, and develop the foreign and domestic commerce, the mining, manufacturing, and fishery industries of the United States."

LOCATION

Commerce is headquartered in Washington, D.C., at the Herbert Clark Hoover Building, which is located on eight acres of land covering three city blocks. Commerce also has field offices in all states and territories and maintains offices in more than 86 countries worldwide.

BUDGET AUTHORITY

The Department's FY 2024 enacted budget authority was approximately $10.8 billion.

WEBSITE

The Department's Internet address is https://www.commerce.gov/.

MISSION

The Department of Commerce's mission is to create the conditions for economic growth and opportunity for all communities.

VALUES

The following four core values lay the foundation to support the Department in upholding its mission: Service, Passion, Respect, Equity.

HEADQUARTERS OFFICES AND OPERATING UNITS (i.e., BUREAUS)

- Office of the Secretary (OS)
- Office of Inspector General (OIG)
- Bureau of Economic Analysis (BEA)
- Bureau of Industry and Security (BIS)
- Census Bureau
- Economic Development Administration (EDA)
- International Trade Administration (ITA)
- Minority Business Development Agency (MBDA)
- National Institute of Standards and Technology (NIST)
- National Oceanic and Atmospheric Administration (NOAA)
- National Telecommunications and Information Administration (NTIA)
- National Technical Information Service (NTIS)
- Office of the Under Secretary for Economic Affairs (OUSEA)
- U.S. Patent and Trademark Office (USPTO)

ORGANIZATIONAL STRUCTURE

U.S. DEPARTMENT OF COMMERCE
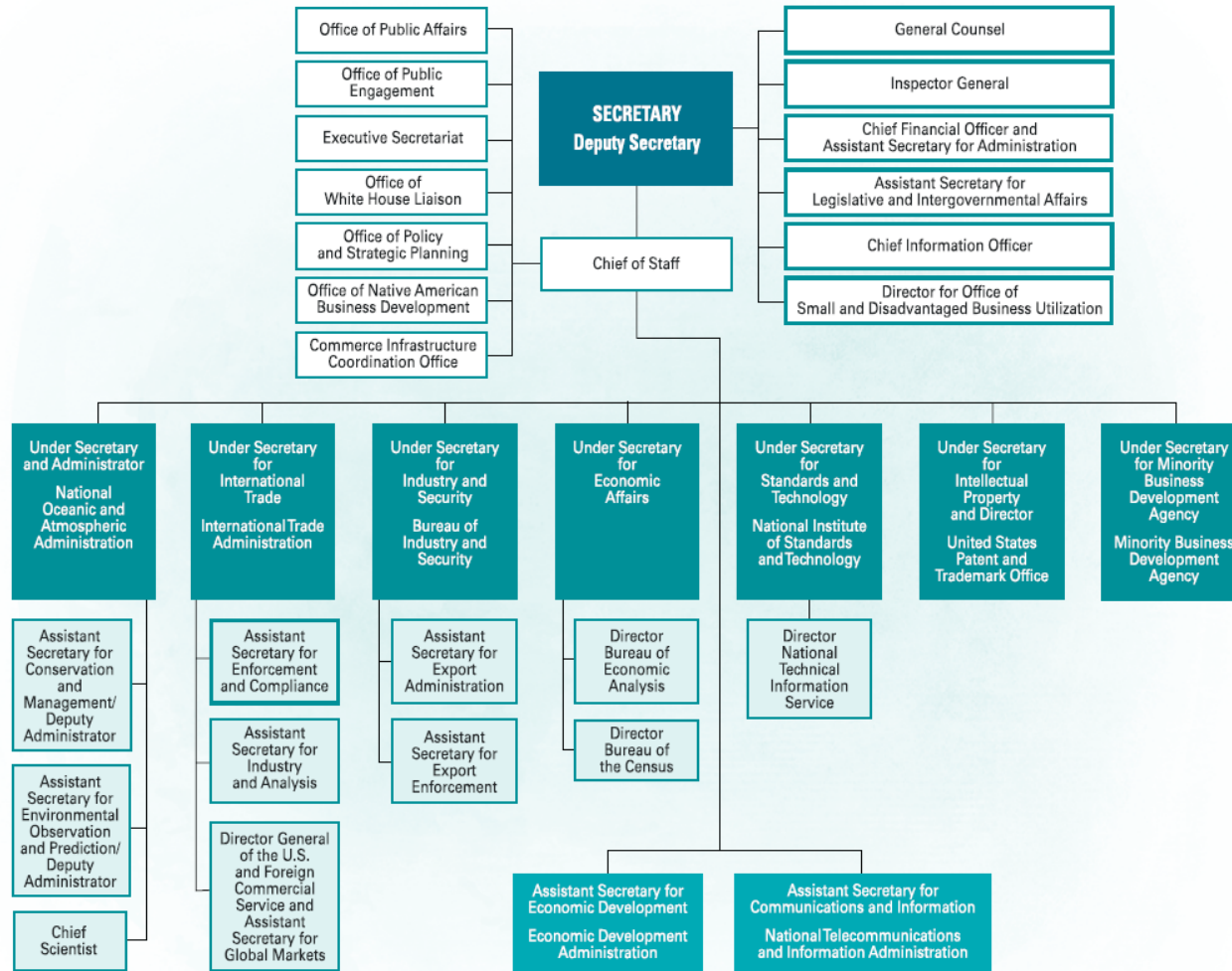
BACKGROUND ON STRATEGIC PLANNING AND REQUIRED REPORTING

Consistent with Government Performance and Results Act (GPRA) and the Modernization Act of 2010 (GPRAMA) requirements, the Secretary of Commerce issued a 2022 – 2026 Strategic Plan with the FY 2023 President's Budget in accordance with the Administration's priorities, GPRAMA, and the policies and timetable established by the Office of Management and Budget (OMB).

Prior to FY 2014, agencies developed and published strategic plans on different schedules. Synchronizing plans promoted coordination and collaboration among Federal agencies. Further, OMB facilitated a multi-agency view by regularly convening agency representatives to discuss plans as they evolved. Developed by the political leadership in collaboration with career leaders and representatives across all operating units, Commerce's 2022 – 2026 Strategic Plan includes strategic goals and objectives, Agency Priority Goals, strategies, key performance indicators (KPIs), and learning agenda questions in line with guidance from the Secretary and the Office of Policy and Strategic Planning. The strategic plan's structure, content, and emphasis align with the priorities of the Secretary and the White House. For example, the Strategic Plan, and related Learning Agenda, incorporate priorities listed in the President's Management Agenda (PMA) and Executive Orders signed during the first year of the Administration.

Typically, the Department publishes a combined Annual Performance Report (APR) and Annual Performance Plan (APP) referred to as the Annual Performance and Plan Report (APPR). Due to the presidential transition in January 2025, the Department is separating the APR and APP. This APR provides detailed performance information aligned to the Strategic Objectives in Commerce's FY 2022-2026 Strategic Plan. This year's separated APR reports the FY 2024 overall performance of all 23 Strategic Objectives compared to their FY 2023 and FY 2022 performance trend. Also, for each Strategic Objective, it reports FY 2024 actual results for key performance indicators as of September 30, 2024, compared to their FY 2024 target and historical performance trend results going back to FY 2020. Additionally, it reports performance of the Department's CARES Act and ARP Act above-base programs, five Agency Priority Goals (APGs), and progress contributing to the President's Management Agenda (PMA). This APR and Department's prior APPRs are posted on Performance.gov for public view. The Department's APP will be published concurrently with the FY 2026 President's Budget Request to Congress.

PROCESS FOR MONITORING PROGRESS

In the late spring and early summer, the Department conducted its Annual Strategic Review (ASR) with the Deputy Secretary. The ASR process includes deliberations by multi-operating unit Strategic Objective implementation teams. These team meetings foster learning and inform revisions of strategies and performance indicators. In August 2024, the Department also conducted an ASR meeting between the Deputy Secretary of Commerce, the Deputy Director of OMB, and senior staff from both organizations to review progress and discuss the FY 2024 ASR Summary of Findings.

Operating unit key performance indicator review processes vary in approach and schedule but are systematic. Data on mission support metrics and initiatives (e.g., Human Resources, Acquisition, Financial Management, etc.) are tracked on online dashboards and typically reviewed monthly by the CXOs (e.g., Chief Financial Officer, Chief Human Capital Officer, Chief Acquisition Officer, and Chief Information Officer).

FUELING LEADING-EDGE PERFORMANCE MANAGEMENT, ENABLING LEANING, AND DRIVING IMPROVEMENT

As a premier Federal statistical agency, Commerce strives to lead the way to improve how data are made more easily accessible and useful for the American public. Consistent with the Foundations for Evidence-Based Policymaking Act's (Evidence Act) imperatives for data accessibility, the Department of Commerce maintains **Commerce Performance Data Pro**, a website that provides the American public an interactive online tool for learning more about Commerce, its strategic objectives, and the progress Commerce is making. This website is an excellent example of how the Federal Government is making performance data more easily accessible and useful for the public.

Using metadata to assign Commerce 's KPIs to Strategic Objectives, Program Activities, and Operating Units, **Commerce Performance Data Pro** provides insight into how the Strategic Plan is executed. The website enables data analysis through interactive charts and graphs. The standard dashboards and charts reveal patterns and trends that make key insights obvious to viewers. The website's analytic capabilities, interactive open data, and ease of use directly support Commerce 's increased use of program impact and performance data in decision making.

SEEING THE DEPARTMENT'S IMPACT IS EASY

By using **Commerce Performance Data Pro**, the American public can easily understand the progress Commerce is making by exploring Commerce *Impact Stories* and interacting with the *Citizen's View Dashboards*, charts, key performance indicators, and featured datasets. Researchers, businesses, and interested citizens will see stories and data about Commerce 's programs that impact daily life. Users can interact with performance data, monitor Commerce's efforts to strengthen the U.S. economy, and learn more about efforts to improve programs and services. The website provides citizens who are interested in the Department of Commerce and want information on its progress with the following tools and capabilities:

- Featured Commerce *Impact Stories* about our focus areas and new strategic initiatives.
- *Citizen's View Dashboards* summarize progress on the strategic plan and show each operating unit's performance.
- Access to over 270 *KPI Insights* tiles that measure program results.
- Ability to connect directly to datasets using an Application Programming Interface (API).
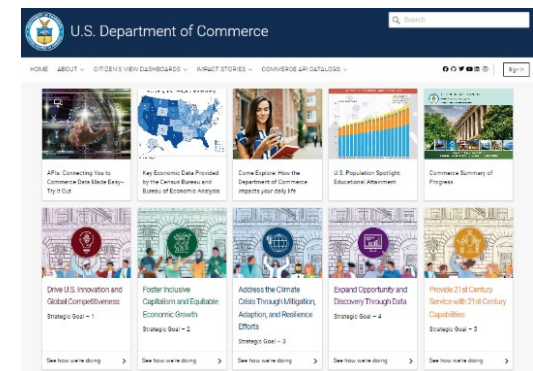
The Department takes rigorous measures to ensure completeness, reliability, and quality of performance data. The management of operating unit KPI data is closely aligned with the Department's annual budget formulation and justification processes. Verification and validation of operating unit KPI data are generally overseen by each operating unit's Chief Financial Officer (CFO) and Budget Director, in close collaboration with their performance and program staff. Operating units submit their KPI data to the Department's headquarters using a dedicated KPI App. Upon submission, operating units affirm that the data are accurate and do not include any Personally Identifiable Information (PII) or Business Identifiable Information (BII). Once

submitted, the KPI data are incorporated into each operating unit's Congressional Budget Submission and uploaded by the Office of Performance Excellence to the **Commerce Performance Data Pro**. The data are also included in the Department's Annual Performance Report (APR).

KEY TERMS AND DEFINITIONS IN THE STRATEGIC PLAN AND ANNUAL PERFORMANCE REPORT

The U.S. Department of Commerce Strategic Plan is organized by Strategic Goals, Strategic Objectives, Strategies, and Key Performance Indicators. This strategic planning structure follows the standardized **Federal Performance Framework** established in guidance from OMB and is used to organize content in all Federal agencies' APRs.

Within this APR, a standardized table is used to show results and targets for key performance indicators for each strategic objective. It is noted if a key performance indicator is new and whether baseline values are established. N/A indicates that data are not available. If needed, an explanation of targets is provided. The targets are typically set based on funding levels requested in the President's Budget.

The following defines terms that are fundamental to the Commerce Strategic Plan and APR:

Strategic Goal – Includes the goal statement and goal overview. The highest-level statement of aim or purpose that is included in the strategic plan. The strategic goals articulate the broad categories of action that Commerce will take to advance its mission.

Strategic Objective (SO) – Includes the objective statement and the objective overview. This plan's 23 strategic objectives are the primary unit for strategic analysis and decision-making. Strategic objectives state the outcomes or management impacts Commerce is trying to achieve.

Strategy – Represents key approaches, initiatives, and tactics that will be pursued to advance the related strategic objective.

Key Performance Indicator (KPI) – A key performance measure used to track progress toward achieving a strategic objective. Commerce measures and monitors the trend for these indicators.

Target – A quantifiable level of achievement that is planned for a measure of Strategic Objective progress.

KPI Status – The actual level of achievement that is realized for each KPI. The status can be marked as exceeded, met, or not met. Unless otherwise noted, a KPIs status is considered Exceeded when the actual is over 100% of the target; Met when the actual is between 90-100% of the target; and Not Met when the actual is less than 90% of the target.

Baseline Value – A key performance indicator's level over one or more time periods to assess the appropriate level for future performance targets.

Evidence – The information used to formulate goals, objectives, and strategies in this plan. Evidence can be quantitative or qualitative and may include, but is not limited to performance measurement, research studies, evaluations, statistical data series, survey information, and data analytics.

SUMMARY OF STRATEGIC GOALS AND OBJECTIVES

The following chart summarizes the progress/status of the strategic goals and objectives established in the 2022 – 2026 Strategic Plan. The complete strategic plan can be accessed online at: https://www.commerce.gov/about/strategic-plan.

Strategic Goal	Strategic Objectives	FY 2022 Status	FY 2023 Status	FY 2024 Status
Goal 1 – Drive U.S. Innovation and Global Competitiveness	1.1 - Revitalize U.S. manufacturing and strengthen domestic supply chains	**On Track**	**On Track**	**Noteworthy Progress**
	1.2 - Accelerate the development, commercialization, and deployment of critical and emerging technologies	**On Track**	**On Track**	**On Track**
	1.3 - Increase international cooperation and commerce	**Noteworthy Progress**	**On Track**	**On Track**
	1.4 - Protect national security interests and enforce trade rules	**On Track**	**Noteworthy Progress**	**Focus Area for Improvement**
	1.5 - Promote accessible, strong, and effective intellectual property rights to advance innovation, creativity, and entrepreneurship	**On Track**	**On Track**	**On Track**
	1.6 - Improve the Nation's cybersecurity and protect Federal Government networks	**On Track**	**On Track**	**On Track**
	1.7 - Advance U.S. leadership in the global commercial space industry	**On Track**	**Focus Area for Improvement**	**On Track**
Goal 2 – Foster Inclusive Capitalism and Equitable Economic Growth	2.1 - Drive equitable, resilient, place-based economic development and job growth	**On Track**	**On Track**	**Noteworthy Progress**
	2.2 - Build sustainable, employer-driven career pathways to meet employers' need for talent and to connect Americans to quality jobs	**On Track**	**On Track**	**On Track**
	2.3 - Advance entrepreneurship and high-growth small and medium-sized enterprises	**On Track**	**On Track**	**On Track**
	2.4 - Expand affordable, high-quality broadband to every American	**On Track**	**On Track**	**On Track**
Goal 3 - Address the Climate Crisis through Mitigation, Adaptation, and Resilience efforts	3.1 - Increase the impact of climate data and services for decisionmakers through enhanced service delivery and improved weather, water, and climate forecasts	**Noteworthy Progress**	**On Track**	**On Track**
	3.2 - Strengthen coastal resilience and advance conservation and restoration of lands and waters for current and future generations	**On Track**	**On Track**	**On Track**
	3.3 - Accelerate development and deployment of clean technologies	**On Track**	**On Track**	**On Track**
	3.4 - Embed climate considerations across Department programs	**On Track**	**On Track**	**On Track**

Strategic Goal	Strategic Objectives	FY 2022 Status	FY 2023 Status	FY 2024 Status
Goal 4 – Expand Opportunity and Discovery through Data	4.1 - Implement evidence-based decision making within the Department of Commerce to increase program and policy impact	**Focus Area for Improvement**	**On Track**	**On Track**
	4.2 - Modernize economic and demographic statistics to better meet business, policymaker, and community needs	**Noteworthy Progress**	**Noteworthy Progress**	**Noteworthy Progress**
	4.3 - Improve Commerce data usability and advance ethical, responsible, and equitable data practices	**On Track**	**On Track**	**On Track**
Goal 5 – Provide 21st Century Service with 21st Century Capabilities	5.1 - Effectively implement new Department of Commerce authorities and investments	**On Track**	**On Track**	**Noteworthy Progress**
	5.2 - Optimize workforce and diversity, equity, and inclusion practices	**Focus Area for Improvement**	**Noteworthy Progress**	**On Track**
	5.3 - Equitably deliver exceptional customer experience	**On Track**	**On Track**	**On Track**
	5.4 - Make Department facilities and operations more sustainable and efficient	**On Track**	**On Track**	**On Track**
	5.5 - Modernize mission support processes and infrastructure	**On Track**	**Focus Area for Improvement**	**Focus Area for Improvement**

DEPARTMENT OF COMMERCE ACCOMPLISHMENTS

On January 17, 2025, Secretary Raimondo published a press release highlighting key accomplishments made by the Department of Commerce during FY 2024 and the entire four years of the Biden-Harris Administration. With this release, the Department published *Investing in American Competitiveness: U.S. Department of Commerce Impact Report*. Key accomplishments include but are not limited to:

Advancing Domestic Production and Securing the Supply Chain
- The CHIPS Program Office awarded approximately $34 billion, signed preliminary terms for an additional $2 billion with more negotiations ongoing, and disbursed more than $4 billion. This represents 34 negotiated deals across 22 states to rebuild the domestic semiconductor manufacturing base.
- The U.S. has seen more investment in electronics manufacturing during the last four years than in the previous three decades combined. Planned investments now are nearly $450 billion, marking the largest wave of semiconductor manufacturing expansion in U.S. history.

Ensuring AI is Safe, Secure, and Trustworthy
- Commerce established the U.S. AI Safety Institute (U.S. AISI), a scientific center of excellence advancing the frontier of evaluating models for dual-use domains such as cyber capabilities, chemical and biological misuse risks, and software and AI development capabilities. NIST produced first-of-its-kind voluntary industry standards for governing, understanding, measuring, and managing risks of AI systems. This included the AI Risk Management Framework, and guidance on protecting against misuse from dual-use foundation models, and labeling/detecting synthetic content.

Boosting U.S. Regional Competitiveness
- Commerce designated 31 regional Tech Hubs, with more than $700 million in investments to ensure key, future technologies start, grow, and remain in the United States. Investments included developing facilities to commercialize new technologies such as sustainable polymers, drones, and quantum sensing. The Tech Hubs attracted nearly $6 billion in investment commitments from private, public, and philanthropic sources.
- The Recompete Pilot Program provided almost $200 million in flexible funds to address the root causes of distress in six communities facing low prime-age employment rates. Together, these six communities represent places with poverty rates nearly triple the national average and median household incomes less than half the national average.
- The Minority Business Development Agency (MBDA) invested $125 million in the first-of-its-kind Capital Readiness Program (CRP). This program funds incubators and accelerators that help underserved entrepreneurs grow and scale their businesses.

Growing American Jobs and the Workforce of the Future
- Commerce's flagship workforce training investment, the $525 million *Good Jobs Challenge*, used sectoral-workforce partnerships to create and deploy proven workforce solutions in key industries such as technology, energy, and manufacturing. The Good Jobs Challenge's 40 awardees are on

track to place 53,000 workers in good-paying jobs with benefits. More than 12,000 workers across 35 states and Puerto Rico made the jump from low-wage, insecure employment into high-demand, quality jobs.

Connecting Everyone in America to Affordable, Reliable, High-Speed Internet Service

- Investments in the Internet for All programs made through FY 2024 will bring access to affordable, reliable, high-speed Internet service to every single household and small business by 2030. Once complete, 7.5 million unserved locations will be connected to the 21st century economy.

Curbing the People's Republic of China (PRC) Military Modernization

- Over four years, through multiple rules, Commerce implemented unprecedented country-wide and sector-wide restrictions on advanced semiconductor technology exports to China, including on advanced chips and on equipment needed to make those chips. These cumulative actions represent a seismic shift in the way that BIS conducts business and imposes export controls.

- This work hampers PRC efforts to indigenize the production of advanced semiconductors and related equipment and tools. These controls target chips needed for developing and deploying the next generation of advanced weapon systems and AI-enabling technologies, directly impacting the PRC's ability to improve the design and execution of weapons of mass destruction (WMD) and advanced conventional weapons.

Degrading Russian Military Capacity

- Commerce implemented export controls on over 2,800 categories of items needed by Russia to sustain military action, including machinery, electrical equipment, microelectronics, aircraft parts, chemicals, and industrial and commercial items. BIS cracked down on Russia's illicit procurement networks, including bringing 13 criminal Strike Force cases against defendants seeking U.S. technologies for Russian end users.

Diversifying and Strengthening Supply Chains

- By establishing a first-of-its-kind Supply Chain Center within the International Trade Administration, Commerce increased the U.S. Government's analytical capacity to identify and address vulnerabilities, work with partners and allies to onshore and friend-shore critical industries, strengthen domestic manufacturing, and defend the existing industrial base from non-market actors.

- The Center launched SCALE, a diagnostic tool that allows the U.S. Government to assess supply chain risk across the U.S. economy and prioritize critical industries and products. This shifted the U.S. approach from reacting to disruptions to proactively strengthening supply chain resilience.

Advancing Climate Resilience

- NOAA announced $2.8 billion in funding through its coastal resilience programs to strengthen ecosystems and communities along the coasts. This enabled NOAA to restore thousands of acres of habitat and waterways, help people across the country make climate-smart investments in their communities and coasts, and improve the climate data and services provided to decision makers, families, communities, and businesses.

- NOAA's $575 million Climate Resilience Regional Challenge program made awards to 19 collaborative projects to increase the resilience of coastal communities to extreme weather and other climate impacts. This program was the most oversubscribed program in the Inflation Reduction Act demonstrating the demand communities across the country have for climate resilience capacity.

CARES ACT AND ARP ACT IMPLEMENTATION

On March 27, 2020, Congress enacted the Coronavirus Aid, Relief, and Economic Security Act, Pub. L. 116-136 (CARES Act). The CARES Act appropriated nearly $2 billion in supplemental funds to the Department of Commerce's following four operating units:

Operating Unit	Amount Allocated	Admin Expenses	Budgetary Resources	Amount Obligated As of September 30, 2024[1]	Amount Outlaid As of September 30, 2024[1]	Overall Status
Economic Development Administration (EDA)	$1.5 billion	$33 million	$1.467 billion	$1.467 billion, 100%	$1.124 billion, 76.59%	**On Track**
National Oceanic and Atmospheric Administration (NOAA)	$320 million	$2.1 million	$317.9 million	$317.8 million, 99.97%	$316.84 million, 99.67%	**Complete**
National Institute of Standards and Technology (NIST)	$66 million	$1.1 million	$64.94 million	$64.94 million, 100%	$64.31 million, 99.03%	**Complete**
Minority Business Development Agency (MBDA)	$10 million	$0	$10 million	$10 million, 100%	$9.73 million, 97.3%	**Complete**

OMB Memorandum M-20-21, Implementation Guidance for Supplemental Funding Provided in Response to the Coronavirus Disease 2019 directed agencies that received CARES Act appropriations to leverage and employ existing financial transparency and accountability mechanisms where possible.

On March 11, 2021, Congress enacted the American Rescue Plan Act, Pub. L. 117-2 (ARP Act). The ARP Act appropriated over $3 billion in supplemental funds to the following Department of Commerce operating units:

Operating Unit	Amount Allocated	Admin Expenses	Budgetary Resources	Amount Obligated As of September 30, 2024[1]	Amount Outlaid As of September 30, 2024[1]	Overall Status
Economic Development Administration (EDA)	$3 billion	$60 million	$2.940 billion	$2.939.87 billion, 100%	$792.95 million, 26.97%	**On Track**
National Institute of Standards and Technology (NIST)	$150 million	$2.44 million	$147.56 million	$147.56 million, 100%	$116.65 million, 79.05%	**On Track**
Minority Business Development Agency (MBDA)	$125 million	$7.98 million	$117.02 million	$117.02 million, 100%	$17.73 million, 15.15%	**On Track**

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[1] When calculating Percent Obligated and Percent Outlaid, the amount used for the denominator is Budgetary Resources, which is the Amount Allocated less Admin Expenses for salaries and expenses and payment to the Department's Office of Inspector General to audit execution of funds.

OMB Memo M-21-20, Promoting Public Trust in the Federal Government through Effective Implementation of the American Rescue Plan Act and Stewardship of the Taxpayer Resources, directed agencies that received ARP Act appropriations to submit implementation plans for new programs established under ARP, include ARP programs in agency equity assessments and action plans, establish detailed and accurate award descriptions to ensure accountability and transparency, and ensure robust and transparent monthly reporting of ARP funding via USASpending.gov. All operating units are either on schedule or ahead of schedule. The following is an update on funding deployment and overall status.

EDA – CARES Act: $1.5 billion; ARP Act: $3 billion
EDA CARES Act Key Progress and Accomplishments

- Under the CARES Act, EDA awarded 1,239 total grants. EDA had closed out 613 awards as of 30 September 2024.
- As of 30 September 2024, EDA obligated 100% and outlaid 76.59% of its CARES Act funds to promote innovation and entrepreneurship, support indigenous communities, and provide support for rural communities.
    - Based on grantee estimates, these awards are expected to create, retain, or place 154,144 jobs within nine years of EDA's investment.
- All CARES Act funds were fully obligated by 30 September 2022 and will be outlaid by 30 September 2027.
- While CARES Act awards do not need to be fully disbursed until 30 September 2027, EDA has already fully disbursed over 50% of the awards with another 12% of projects at 90% disbursement or higher.
- EDA's CARES or ARP Act funds have no actively identified instances of waste, fraud, or misuse.

EDA ARP Act Key Progress and Accomplishments

- Under the ARP Act, EDA awarded 780 total grants.
    - Based on grantee estimates, these awards are expected to create, retain, or place 220,000 jobs within nine years of EDA's investment.
- As of 30 September 2024, EDA obligated $2.94 billion or 100% and outlaid $792.95 million or 26.97% of its ARP Act funding.
- As of 30 September 2024, the Good Jobs Challenge (GJC) has enrolled over 28,000 program participants, of which 8,773 have been placed in good jobs. Job placements increased by nearly 60% from the prior quarter. All 21 Build Back Better Regional Challenge (BBBRC) coalitions are on track with no significant risks. BBBRC coalitions have leveraged nearly $1 billion in funding and generated $2.4 billion in private investment with over 16,000 businesses and 6,500 participants engaged in BBBRC programming.

NOAA – CARES Act: $320 million
NOAA CARES Act Key Progress and Accomplishments

- Under the CARES Act, NOAA awarded 6 total grants.
- As of 30 September 2023, NOAA obligated and outlaid 100% of its Fisheries specific CARES Act funding; and 29 of 29 states and territories and 31 of 31 tribes have completed their disbursements. No identified instances of waste, fraud, or misuse of funds with NOAA's CARES Act funds.
- No further updates for FY 2024.

NOAA – Consolidated Appropriation Act (CAA), 2021: $300 million

NOAA CAA Key Progress and Accomplishments

- As of 30 September 2024, NOAA obligated 100% and outlaid 100% of its Fisheries assistance specific to Consolidated Appropriations Act, 2021 funding. NOAA is in the process of closing out all 6 awards.

NIST – CARES Act: $66 million; ARP Act: $150 million

NIST CARES Act Key Progress and Accomplishments

- NIST obligated all 100% and outlaid 98.8% of its MEP specific CARES Act funding as of 30 September 2022.
- More than 28,000 projects have been completed, which generated $3 billion in sales, $1.2 billion in total investment, $456.2 million in cost savings, and created and retained 33,259 jobs.
- As of 31 January 2022, NIST obligated and outlaid all 100% of its Manufacturing USA specific CARES Act funding.
- No further updates for FY 2024.

NIST ARP Act Key Progress and Accomplishments

- As of 30 September 2024, NIST obligated 100% and outlaid 79.05% of its ARP Act funding.

MBDA – CARES Act: $10 million

MBDA CARES Act Key Progress and Accomplishments

- MBDA completed its CARES Act outlays during FY 2022 and reported progress in the FY 2022/2024 APPR.
- MBDA also received $25 million in Coronavirus Response and Relief funding under the Consolidated Appropriations Act to assist minority businesses necessary expenses that exist to prevent, prepare for, and respond to coronavirus, and identify or access Government assistance.
- As of 30 September 2023, $25 million or 100% was obligated and $24.5 million or 97.80% was outlaid. Remaining funds were rescinded under the Fiscal Responsibility Act as two grantees decided not to use their allocated funds. Since these funds cannot be re-awarded, MBDA has obligated and outlaid all planned Consolidated Appropriations Act funds.

MBDA ARP Act Key Progress and Accomplishments

- The MBDA Capital Readiness Program (CRP) is funded by the Department of Treasury's State Small Business Credit Initiative (SSBCI), which was reauthorized under the American Rescue Plan Act of 2021.
- CRP is a technical assistance program to help minorities and other underserved entrepreneurs grow and scale their business.
- As of 30 September 2024, MBDA has obligated 100% and outlaid 15.15% of this ARP Act funding.

President's Management Agenda

The following information highlights key accomplishments the Department made supporting the President's Management Agenda (PMA).

PMA Priority Area 1: Strengthening and Empowering the Federal Workforce

Legislation-Driven Surge Hiring

The passage of the CHIPS and Science Act, the Bipartisan Infrastructure Law (BIL), and the Inflation Reduction Act (IRA), created an urgent need to recruit specialized talent to support these critical initiatives. The Department lacked an agency-wide process to respond to these sudden mission expansions and surges in hiring for specialized skill sets. In response, the Department streamlined procedures and communication channels to identify hiring flexibilities, accelerate standard hiring timelines, and implement ongoing performance measurement. The Department now has a well-established network of administrative professionals within human capital organizations capable of swiftly addressing unexpected and urgent hiring needs.

The Department established a dedicated Talent Strategy team within the Office of Human Resources Management (OHRM) and a centralized team responsible for tracking and reporting progress to leadership. OHRM developed resource materials, including strategic workforce planning tools, and created standing functional working groups to respond to future surge hiring needs. The Department reports quarterly performance metrics for ongoing hiring efforts such as number of vacancies, departures, and filled positions to senior leadership, the Deputy Secretary, and Secretary.

PMA Priority Area 2: Delivering Excellent, Equitable, and Secure Federal Services and Customer Experience (CX)

Building the Department's Inaugural CX Community of Practice

Directly supporting the PMA, the Department developed and implemented its first-ever Department-wide CX training program to strengthen CX maturity. In 2023, the Department conducted a maturity assessment that indicated a need for common CX training. In FY 2024, operating unit leadership nominated 50 employees from key offices to participate in the inaugural CX Champion and Advocates Training Program. These employees received specialized CX training to develop skills to lead and support CX projects and build CX capacity within their program or office. In summer 2024, the Department graduated 50 employees from the program. They represent 11 of 14 of the Department's operating units and most Headquarters offices. The training had a strong ROI, as participants reported a 27%-53% improvement in key CX competencies assessed by the course and indicated they intended to apply the training they received.

The Department will cement this progress by launching its inaugural Department CX Community of Practice in Fall 2024. This community will focus on sharing resources and best practices, leveraging the collective expertise of its members to drive agency-wide CX initiatives. The Department also plans to launch a second CX Champion and Advocates Training Program. This effort will raise the total number of employees trained in CX to 100. These trainings will incorporate pre- and post-evaluations to measure effectiveness, enabling the Department to use performance management and program evaluation to assess results over time.

Increasing Adoption of Innovative Practices

The Department adopted innovative acquisition practices to achieve better outcomes, reduce administrative burdens, and increase efficiency. Prior to 2021, the Department used acquisition methods that led to lengthy processes and excessive documentation. This hindered the timely procurement of goods and services and affected the ability to meet customer needs effectively. In May 2021, the Department launched the Acquisition Innovation Lab "The Lab" to improve the acquisition process. During the past two years, The Lab coached 10 acquisition improvement projects. These projects had a total awarded value of over $1.3 billion, resulted in $136 million in cost savings, and averaged less than 90 days to award.

The Lab intends to integrate all members of the acquisition team, use innovative and underused acquisition techniques, accelerate delivery, and reduce administrative overhead. The Lab will offer formal coaching and consulting services to streamline acquisition processes for better mission outcomes. The Department will encourage its acquisition workforce to pursue innovation and soft skills training through The Lab's micro-credentialing program. KPIs show a steady growth in workforce training from 88 employees in FY 2022 to 739 employees in FY 2024 and credentialing from 33 employees in FY 2022 to 285 employees in FY 2023.

The Lab will refine coaching strategies and improve acquisition innovation. In FY 2024, the Lab conducted its first post-award interviews and a pilot survey with NIST which showed 80% of respondents experienced reduced Procurement Action Lead Time.

FY 2024- 2025 Agency Priority Goals

The Department made significant progress to advance its five agency priority goals (APGs). At the end of the first year of implementing the Department's APGs, all operating units are on track to meet their APG targets. Quarterly progress updates for all APGs can be found on performance.gov.

APG 1 – Advance U.S. Semiconductor Manufacturing

Implementing Operating Unit: National Institute of Standards and Technology (NIST)

APG Target: By September 30, 2025, the Department of Commerce will advance U.S. national security and economic competitiveness by building domestic semiconductor manufacturing capacity through investing in the development of a range of semiconductor facilities and upstream suppliers, including at least two clusters dedicated to the fabrication of leading-edge logic chips; and by investing in research and development programs focused on supporting research in semiconductor technology, metrology, advanced packaging, and manufacturing.

APG Status: On Track (Commerce expects to reach its APG targets by September 2025)

APG Summary of Progress: During FY 2024, CHIPS for America's Program Office signed 16 non-binding preliminary memorandum of terms (PMT) and announced the first commercial fabrication facilities award to Polar Semiconductor for $123 million. CHIPS for America's Research and Development Office issued three notices of funding opportunity (NOFO) with investments up to $640 million which reflects nearly $5 million awarded. The Office also signed the base OTA for the National Semiconductor Technology Center (NSTC) with an expected investment up to $5 billion.

During FY 2024, CHIPS R&D committed approximately $3 billion in funding to various semiconductor research and development opportunities. CHIPS Research and Development (R&D) issued three NOFOs totaling over $600 million, which included National Advanced Packaging Manufacturing Program's (NAPMP) first NOFO, CHIPS Metrology's FY 2025 Small Business Innovation Research (SBIR) program, and CHIPS Manufacturing USA institute for digital twins. NAPMP and CHIPS Manufacturing USA downselected applicants from these NOFOs and invited them to submit full proposals. They also conducted site visits as part of their due diligence ahead of selection and award. Notices of Intent (NOI) were also issued for future NOFOs, including NAPMP's second NOFO. CHIPS Metrology awarded nearly $5 million in support of their SBIR program to 17 small businesses across the country and launched the Metrology Community and METIS data exchange. CHIPS R&D and the National Science Foundation (NSF) signed a memorandum of understanding to jointly invest in a new initiative to train the future semiconductor workforce and jointly issue a public Request for Information (RFI) seeking input from the community to inform the new initiative. CHIPS R&D and Natcast announced three new facilities and launched the NSTC Workforce Center of Excellence.

APG 2 – Ensure all Americans have access to high-speed, affordable, and reliable broadband

Implementing Operating Unit: National Telecommunications and Information Administration (NTIA) Jointly implemented with the U.S. Department of Agriculture

APG Target: By September 30, 2025, the Departments of Agriculture and Commerce will expand affordable and reliable access to broadband service by funding projects, which when completed, will provide at least 6,250,000 households and other locations with reliable and affordable access to high-quality internet service. This will be achieved through investment in broadband infrastructure and related activities, accompanied by outreach and technical assistance, and in coordination with applicable Federal agencies, to promote American household accessibility to affordable, reliable, high-speed Internet service.

APG Status: On Track (Commerce expects to reach its APG targets by September 2025)

APG Summary of Progress: As of the end of Q4 FY 2024, Commerce and USDA funded projects that, when implemented, will provide broadband to 26,856 households and locations. In FY 2024, NTIA made major strides towards expanding affordable and reliable access to broadband service. Awards under the first round of Tribal Broadband Connectivity Program (TBCP) funding are underway. Early reports show that 433 households now have lit broadband service, and 2,921 tribal households have gained new access to the Internet, such as through subscriptions. The Broadband Infrastructure Program reported providing lit broadband service to 21,038 households and 2,299 businesses. NTIA reviewed more than 160 applications for the second round of TBCP funding, requesting more than $2.64 billion. Additionally, NTIA approved 55 of 56 Initial Proposals from States and Territories and expects to receive Final Proposals at the end of calendar year 2024.

APG 3 – Advance Towards Climate-Ready Coasts

Implementing Operating Unit: National Oceanic and Atmospheric Administration (NOAA)

APG Target: By September 30, 2025, NOAA will improve climate resilience in coastal communities by completing 100% of programmatic milestones: to improve fish passage for threatened and endangered species; support coastal habitat restoration priorities of tribes and underserved communities, remove marine debris; and protect and conserve coastal and Great Lakes habitats.

APG Status: On Track (NOAA expects to reach its APG targets by September 2025)

APG Summary of Progress: In FY 2024, NOAA completed 64% of its target to complete 100% of programmatic milestones. During the first year of this APG, NOAA announced over $610 million funding in projects along with nearly $104 million in future year funding to restore coastal and fish habitat, improve fish passage, and build capacity for Tribes and Underserved Communities. NOAA also supported the removal of over 81,858 pounds of marine debris and awarded $23 million in Bipartisan Infrastructure Law funding (BIL). This brings the program total to over $96 million in BIL and Inflation Reduction Act funds awarded to communities to remove marine debris and install debris interception technologies across 26 states, U.S. territories, districts, and Freely Associated States. Additionally, three sub-award competitions were launched for the removal of marine debris at a smaller scale,

including two national competitions and one statewide competition in Alaska. NOAA completed six land acquisitions, which protect the land in perpetuity. Also, NOAA completed a seagrass restoration project that planted approximately 80 acres of grasses. Awardees completed half of the year one acquisitions projects which protect lands in Virginia, Ohio, Wisconsin, North Carolina, and South Carolina. Awardees began other restoration projects across the country, including watershed restoration, living shoreline construction, and stream channel reconstruction.

APG 4 – Accelerate Place-based and Innovation-driven Economic Development

Implementing Operating Unit: Economic Development Administration (EDA)

APG Target: By September 30, 2025, Economic Development Administration (EDA) will equitably and inclusively accelerate high-growth industry clusters that are critical for U.S. global competitiveness. This will be achieved by supporting economic transformation of 21 U.S. regions awarded through the Build Back Better Regional Challenge and by designating at least 20 regional technology hubs (Tech Hubs).

APG Status: On Track (EDA expects to reach target by September 2025)

APG Summary of Progress: During Phase one, EDA designated 31 Tech Hubs which exceeded the statutory requirement of 20. During this phase, EDA also awarded 29 Strategy Development Grants (SDGs) for regions to further develop their technology-based regional economic development strategies. During Phase 2, EDA awarded 12 Tech Hubs with implementation funding to accelerate the commercialization of critical technologies.

APG 5 – Protect U.S. Critical and Emerging Technology

Implementing Operating Unit: Bureau of Industry and Security (BIS)

APG Target: By September 30, 2025, the Bureau of Industry and Security (BIS) will enhance its efforts to protect U.S. critical and emerging technologies by: 1) conducting outreach to a minimum of 2,500 domestic and foreign companies, foreign governments, and other parties to increase awareness of and thus compliance with export controls; and 2) enhancing the effectiveness of our controls by increasing the number of enforcement outcomes by 15% and increasing the number of end-use checks, which are a critical tool to prevent the transshipment and diversion of U.S. items, by 25%.

APG Status: On Track (BIS expects to reach its APG targets by September 2025)

APG Summary of Progress: In FY 2024, BIS conducted 7,810 outreaches, as well as 2,271 enforcement actions and 1,443 end-use checks. BIS exceeded its FY 2024 goals, increasing outreach, enforcement actions, and end-use checks to enhance efforts to protect U.S. critical and emerging technologies. BIS rolled out the new redesign of the BIS website with the aim to improve access to information on export controls and tools to assist with compliance. BIS revised a Memorandum of Understanding with outreach event co-sponsors to assist in collecting more accurate data on the number of entities reached. BIS completed testing of the Commerce Screening System (CSS).

STRATEGIC OBJECTIVES' PERFORMANCE ASSESSMENT AND PLANNING

STRATEGIC OBJECTIVE 1.1 – Revitalize U.S. manufacturing and strengthen domestic supply chains

Lead Operating Unit: NIST
Contributing Operating Units: BEA, BIS, Census, EDA, ITA, MBDA, NTIA

Key Strategies:
- Advance U.S. leadership in semiconductors
- Increase the resilience and diversity of critical, domestic supply chains
- Accelerate technology development and deployment in U.S. manufacturing

Executive Summary of Progress

National Institute of Standards and Technology (NIST)

In FY 2024, NIST made significant progress to implement the CHIPS and Science Act. CHIPS for America announced non-binding preliminary Memorandum of Terms (PMT) agreements with over 16 different companies. More information on the proposed funding sites and award amounts can be found here. Current CHIPS Research & Development (R&D) funding opportunities can be found here. CHIPS for America released three Notice of Funding Opportunities (NOFO) for CHIPS R&D Programs. The three NOFOs are for the following programs:

- CHIPS Manufacturing USA Institute: The Department issued a NOFO to seek proposals from eligible applicants for activities to establish and operate a CHIPS Manufacturing USA institute focused on digital twins for the semiconductor industry. The CHIPS for America Program anticipates up to approximately $285 million for a first-of-its kind institute focused on the development, validation, and use of digital twins for semiconductor manufacturing, advanced packaging, assembly, and test processes.
- CHIPS Metrology Small Business Innovation Research (SBIR): The Department issued a NOFO to seek application-eligible small businesses to explore the technical merit or feasibility of an innovative idea or technology to develop a viable product or service for introduction in the commercial microelectronics marketplace. The CHIPS for America program anticipates up to approximately $54 million in funding across multiple topics on research projects for critically needed measurement services, tools, and instrumentation; innovative manufacturing metrologies; novel assurance and provenance technologies; and advanced metrology R&D testbeds to help secure American leadership in the global semiconductor industry.

- o CHIPS for America awarded nearly $5 million to 17 small businesses under the SBIR program, marking the first award for the CHIPS R&D Office.
- CHIPS National Advanced Packaging Manufacturing Program (NAPMP) Materials and Substrates R&D: The Department issued a NOFO to seek applications for R&D activities that will establish and accelerate domestic capacity for advanced packaging substrates and substrate materials, a key technology for manufacturing semiconductors. The CHIPS for America program anticipates awarding approximately $300 million in amounts up to approximately $100 million over up to five years per award. Program awards may be leveraged by voluntary co-investment.
  - o The Department also issued a Notice of Intent (NOI) to open a competition for new R&D activities that will establish and accelerate domestic capacity for semiconductor advanced packaging. The CHIPS for America program anticipates up to $1.6 billion in funding innovation across five R&D areas, as outlined in the vision for the NAPMP.

In February 2024, leaders from the Departments of Commerce, Defense, and Energy, as well as the National Science Foundation (NSF), and the Chief Executive Officer (CEO) of the National Center for the Advancement of Semiconductor Technology (Natcast) gathered at the White House to announce over $5 billion in expected investment in the CHIPS R&D program, including the National Semiconductor Technology Center (NSTC), and formally establish a public-private consortium for the NSTC. The Department and Natcast announced the processes for selecting the first three R&D facilities funded through the CHIPS and Science Act. The facilities include an NSTC Prototyping and NAPMP Advanced Packaging Piloting Facility, a NSTC Administrative and Design Facility, and an NSTC Extreme Ultraviolet (EUV) Center. The Department announced the launch of the NSTC's Workforce Center of Excellence (WCoE).The WCoE will bring together stakeholders from across the private sector, government, nonprofits, training providers, community and technical colleges, universities, and labor organizations to develop innovative solutions to the industry's workforce challenges, accelerate best practices, promote good jobs, and strengthen recruitment and training of the next generation of semiconductor researchers, engineers, and technicians. The Department expects an investment of $250 million into the WCoE over ten years. More information, including inaugural NSTC Workforce Partner Alliance Awardees, can be found here.

The Department, in conjunction with NSF, announced a $30 million funding opportunity to establish the Network Coordination Hub that will manage the National Network for Microelectronics Education (NNME) and lead its national strategy to train skilled workers for good-paying jobs needed in the American semiconductor and microelectronics industry over the next decade. The Hub will be managed by NSF in close coordination with the Department of Commerce.

The Department announced that GlobalFoundries, Polar Semiconductor, Intel, Micron, and HP Inc. have all voluntarily committed to adopt the CHIPS Women in Construction Framework. The Framework is part of the Secretary's ongoing Million Women in Construction Initiative that aims to expand the American construction workforce by doubling the number of women in construction over the next decade. Under the Framework, companies will work with contractors, trade unions, and other community and workforce partners to implement best practices that will expand the construction workforce by increasing the number of women and economically disadvantaged individuals. CHIPS for America announced the establishment of the CHIPS Metrology Community, which is a new community of practice. The Community will facilitate data and knowledge sharing across initiatives within the CHIPS Metrology seven Grand Challenges and help stakeholders inform the industry standards that are critical for enhancing American economic and national security competitiveness.

NIST announced an open competition for a new Manufacturing USA institute focused on the use of artificial intelligence (AI) to increase the resilience of American manufacturers. NIST anticipates funding up to $70 million over a five-year period for the recipient to establish and operate the new institute, which will be required to obtain cost-share funds from nonfederal sources. The new Manufacturing USA institute will be expected to develop cost-effective, AI-based advanced manufacturing capabilities by collaborating with industry, academia, and government. Additionally, the Manufacturing USA Program released its Strategic Plan which describes the program's goals, visions, and objectives.

NIST announced the launch of the enhanced manufacturing.gov website, a primary hub for information about federal manufacturing programs, funding opportunities, and other valuable resources. The website provides a central location for descriptions and contact information for federal programs, open funding opportunities, topic-focused pages, and announcements from the White House and federal agencies related to American manufacturing.

June 1, 2024 marked the one-year anniversary of the NIST Manufacturing Extension Partnership (MEP) Supply Chain Optimization and Intelligence Network (SCOIN), a two-year pilot program to kick-start supply chain efforts across the country. Authorized by the CHIPS and Science Act of 2022, NIST MEP awarded a total of $20 million for SCOIN to MEP Centers in each state and Puerto Rico. This is an initial investment toward building more resilient, sustainable domestic supply chains through MEP assistance. The SCOIN pilot program expands the scope of the MEP National Network™ from working primarily with individual companies to taking a more comprehensive approach to manufacturing supply chains.

MxD, the digital manufacturing and cybersecurity institute, announced a new partnership with NIST MEP to advance digital adoption by small and medium-sized manufacturers (SMMs). The five-year collaboration will help strengthen America's manufacturing base and increase competitiveness by delivering tailored support to SMMs to accelerate digital adoption initiatives, including cybersecurity preparedness, and securing funding opportunities that directly benefit SMMs. Additionally, the Hollings MEP published a new interactive map to help manufacturers find workforce-related programs and services offered by MEP Centers in every state and Puerto Rico. The new interactive map showcases MEP workforce activities across the country. It enables the manufacturers and the public to learn more about what each MEP Center does.

Bureau of Industry and Security (BIS)
BIS worked to increase transparency in semiconductor supply chains and provided policy guidance to support domestic manufacturing through multiple defense industrial base assessments. In FY 2024, BIS completed a survey and assessment of the uses of People's Republic of China (PRC)-manufactured legacy chips in critical industries and U.S. Government supply chains and delivered a report to the Secretary of Commerce. The goal of the Legacy Chips assessment was to gather more information on companies' visibility into their supply chains and the use of legacy chips in general, and those manufactured in the PRC by PRC-headquartered entities specifically.

Bureau of Economic Analysis (BEA)
BEA developed data products to shed light on the role of American business in global supply chains. New products include the first-ever experimental statistics on American direct investment abroad by ultimate host economy. These statistics allow users to "look through" the complex ownership chains of American multinational enterprises to see how investments abroad translate into production activity. Additionally, BEA partnered with the Office of the Undersecretary for Economic Affairs (OUSEA), the International Trade Administration, and Statistics Canada to develop regional U.S.-Canada supply-

use tables that provide detail on the production linkages between the United States and Canada, which is one of our largest trading partners. Finally, BEA produced an update for the Trade in Value Added (TiVA) statistics that provided information through 2022.

International Trade Administration (ITA)
ITA provides a critical link between industry and the U.S. Government by identifying and addressing supply chain vulnerabilities. In this role, ITA invested in its Supply Chain Center (SCC) to bring together data and expertise to anticipate supply chain challenges, set strategic priorities for policy focus, and act on data-driven risk analysis. ITA conducted industry-focused analyses on topics such as supply chain focused projects on quantum computing, broadband, the semiconductors ecosystem in Indo-Pacific Economic Framework for Prosperity (IPEF) countries, AI data centers, hydrogen, and electrical steel. In September 2024, SCC launched the Supply Chain Assessment Learning Engine (SCALE). This supply chain diagnostic tool enables the U.S. Government to be more proactive and strategic in building resiliency for the supply chains that matter most to American competitiveness, economy, and national security. The tool utilizes a comprehensive set of indicators to assess current or prospective supply chain risks across the American goods economy. It provides a data-driven, objective way for the U.S. Government to assess systemic risk in supply chains by evaluating criticality, vulnerability, and resiliency.

SCC worked to operationalize and implement the IPEF Agreement Relating to Supply Chain Resiliency. The Agreement entered into force in February 2024 and includes the Supply Chain Council and Crisis Response Network (CRN), first-of-their-kind cooperative mechanisms between the U.S. and Asia-Pacific partners that support and promote resilient and secure supply chains through collaborative programming. The Supply Chain Council charted a path forward for initial activities, including establishing three Action Plan teams on semiconductors, chemicals, and critical minerals as well as two subcommittees. ITA likewise serves as the lead representative for the United States in the Group of Seven (G7) Semiconductor Point-of-Contact Group, which launched in March 2024.

In the wake of the Baltimore Key Bridge collapse in March 2024, ITA reacted quickly to ensure supply chain resiliency for a primary aluminum producer at risk of shutting down due to undelivered goods. As a result, the U.S. retained access to 130,000 metric tons of primary aluminum capacity which represents roughly 15 percent of total U.S. capacity. This action supported 472 American Steelworker direct jobs and 1,140 indirect jobs. Additionally in Europe, ITA facilitated the suspension of operational restrictions that could have adversely affected cargo carrier operations at Amsterdam Schiphol Airport in the Netherlands, preventing potential supply chain disruptions.

Economic Development Administration (EDA)
EDA made notable progress towards advancing the manufacturing sector through strategic investments and targeted initiatives. For Phase 2 of the Tech Hubs program, EDA made implementation awards to 12 designated Tech Hubs, many of which focus on bolstering manufacturing capabilities. Several hubs work on projects to develop advanced manufacturing technologies, improve production processes, and create sustainable manufacturing practices. The NY SMART I-Corridor Tech Hub, for example, will use its $40 million implementation award to conduct end-to-end semiconductor manufacturing and provide career pathways and employment opportunities to the region's historically underserved communities. Over the years, EDA made multiple awards to the Reese Technology Center, which was established to mitigate the impacts of the Reese Air Force Base closure in Lubbock, Texas. In FY 2024, the Center provided a success story on how EDA's investments transformed the base closure into an economic success. These investments created jobs, attracted new businesses, and established the Center as a hub for innovation and growth. EDA also made awards through its regular programming to

support manufacturing-related activities. In FY 2024, EDA invested nearly $131 million across 110 awards to help communities and regions build the capacity for economic development through manufacturing-related activities. Through these strategic investments and partnerships, EDA drove innovation, economic growth, and resilience in American manufacturing.

Minority Business Development Agency (MBDA)

MBDA operated four Advanced Manufacturing Projects (AMPs) in FY 2024. The MBDA AMPs worked collaboratively with the MBDA network and other Federal (e.g., NIST MEP), as well as state and local manufacturing programs. The MBDA AMPs vetted minority business enterprise (MBE) manufacturers and referred those MBEs to advanced manufacturing resources. The MBDA AMPs matched MBEs to opportunities as well as supported MBEs to secure capital and financing. Further, the MBDA AMPs provided training and education for MBEs on the benefits of strategic growth alternatives (e.g., mergers, acquisitions and/or joint ventures).

Performance Indicator Results

Class	Operating Unit	Performance Indicator	FY 2020 Actual	FY 2021 Actual	FY 2022 Actual	FY 2023 Actual	FY 2024 Actual	FY 2024 Target	FY 2024 Status
Current/ Recurring	NIST	Value of advanced manufacturing technology portfolio within Commerce-sponsored Manufacturing USA Institutes	—	$47.30 M	$135.10 M	$147.00 M	$207.64 M	$152.00 M	Exceeded
Current/ Recurring	BIS	Number of industrial base surveys, data, and analysis distributed to federal agencies and critical sector	7	6	4	2	3	3	Met
Current/ Recurring	NIST	Number of small and medium manufacturers who receive technical assistance to increase contributions of additional key products and critical technologies in the domestic supply base	—	—	465	488	535	531	Exceeded
Current/ Recurring	MBDA	Number of jobs by (Manufacturing) MBE clients	—	856	749	2,927	1,685	990	Exceeded

Strategic Conclusions

The Department made strides to revitalize American manufacturing and strengthen domestic supply chains through multiple means. NIST, ITA, BEA, and BIS are working to clarify global supply chain linkages, strengthen domestic manufacturing, and enhance American supply chain resiliency. These efforts have major implications in American competitiveness and in overall national security.

NIST met and exceeded its KPI targets to measure the success of programs that support S.O. 1.1 and has also made substantial progress to support American manufacturing such as through the implementation of the CHIPS and Science Act, Manufacturing Extension Partnership, the Manufacturing USA network, and internal research programs. Additionally, in FY 2024, BIS met its KPI goal to conduct three defense industrial base surveys and provide data to policy makers in federal agencies, including related to American supply chains for legacy chips with a focus on the PRC.

One challenge to address is the low overall representation of MBEs in this sector. External research shows that MBEs comprise about 22 percent of the service sector firms supporting manufacturing but represent only about 10% of manufacturing firms. For example, there were 23,129 total classifiable manufacturing firms, of which MBEs represented 2,378. Among all classifiable American manufacturing firms, only 1,628 are Asian-owned, 523 are Hispanic-owned, and 110 are Black-owned. MBDA AMPs helped MBEs to scale and build capacity through partnerships. Some AMPs focused on constructing teaming agreements, as well as exposing MBEs to potential joint ventures and mergers and acquisitions. AMPs supported innovation and competitiveness of MBEs engaged in manufacturing by referring them to specialized training including, but not limited to, NIST MEP and ISO 50001, lean product development, and Six Sigma programs. Improved collaboration and coordination between MBDA AMPs and manufacturing-focused partners is essential to support MBE growth in this sector.

STRATEGIC OBJECTIVE 1.2 – Accelerate the development, commercialization, and deployment of critical and emerging technologies

Lead Operating Unit: NIST
Contributing Operating Units: BIS, EDA, ITA, MBDA, NOAA, NTIA, NTIS

Key Strategies:
- Promote research, applications, and standards for emerging technologies such as quantum computing, AI, biotechnology, and advanced communications
- Strengthen U.S. participation in technical standards development
- Strengthen the competitiveness of America's R&D ecosystem through inclusive commercialization and technology transfer of critical and emerging technologies

Executive Summary of Progress

The Department of Commerce, through multiple operating units, made significant progress to accelerate the development, commercialization, and deployment of critical and emerging technologies (CETs). Major efforts and accomplishments in FY 2024 that have contributed to progress on Strategic Objective 1.2 are highlighted below.

National Institute of Standards and Technology (NIST)

Artificial Intelligence (AI)
In response to *Executive Order 14110: Safe, Secure and Trustworthy Development of AI* in FY 2024, NIST released three key publications to address the technical, security, and global policy dimensions of generative AI. These publications equip stakeholders with comprehensive frameworks and practices to manage AI risks, develop secure systems, and promote international collaboration. NIST's finalized publications include:
- The *AI Risk Management Framework (RMF) Generative AI Profile* (NIST AI 600-1) that can help organizations identify unique risks posed by generative AI and proposes actions for generative AI risk management that best aligns with their goals and priorities. The guidance is intended to be a companion resource for users of NIST's AI RMF. It centers on a list of 12 risks and just over 200 actions that developers can take to manage them.
- *Secure Software Development Practices for Generative AI and Dual-Use Foundation Models* (NIST SP 800-218A), which is designed to be used alongside the NIST Secure Software Development Framework (SSDF). This companion resources expands the SSDF in part to address a major

concern with generative AI systems where they can be compromised with malicious training data that adversely affect the AI system's performance.

- *A Plan for Global Engagement on AI Standards* (NIST AI 100-5), which is designed to drive the worldwide development and implementation of AI-related consensus standards, cooperation and coordination, and information sharing.

NIST released an Initial Public Draft of *Guidelines for Evaluating Differential Privacy Guarantees* (NIST SP 800-226) for public comment. A final report is in progress. Additionally, NIST released *Adversarial Machine Learning: A Taxonomy and Terminology of Attacks and Mitigations* (NIST AI 100-2 E2023). The report is an important step for establishing a common language for understanding threats and mitigation methods in the field of adversarial machine learning and can inform future standards and best practices for assessing and managing machine learning security in this rapidly advancing landscape.

NIST announced new guidance and tools following *Executive Order 14110: Safe, Secure and Trustworthy Development of AI*. One such tool, Dioptra, helps AI developers and customers determine how well their AI software stands up to a variety of adversarial attacks. The open-source software, available for free download, could help the community, including government agencies and small to medium-sized businesses, conduct evaluations to assess AI developers' claims about their systems' performance. To help improve understanding of AI's capabilities and impacts, NIST launched a new Testing, Evaluation, Validation and Verification (TEVV) program. Assessing Risks and Impacts of AI (ARIA) aims to help organizations and individuals determine whether a given AI technology will be valid, reliable, safe, secure, private, and fair once deployed. NIST also launched the GenAI Challenge which will support development of methods to distinguish between content produced by humans and content produced by AI.

Since the launch of the U.S. AI Safety Institute (USAISI), which was established to advance the science, practice, and adoption of AI safety across the spectrum of risk, including those to national security, public safety, and individual rights, NIST has made progress to achieve its objectives. In May 2024, Secretary Raimondo released a strategic vision for the USAISI describing the department's approach to AI safety. The strategic vision released outlines the steps that the AISI plans to take to advance the science of AI safety and facilitate safe and responsible AI innovation. In addition to the USAISI, a supporting Consortium was announced and the inaugural cohort includes more than 285 member companies and organizations that are on the frontlines to create and use the most advanced AI systems and hardware. The consortium represents the largest collection of test and evaluation teams established to date and will focus on efforts to establish the foundations for a new measurement science in AI safety. NIST's AISI also released the initial public draft of its guidelines on *Managing Misuse Risk for Dual-Use Foundation Models* (NIST AI 800-1), which outlines voluntary best practices for how foundation model developers can protect their systems from being misused to cause deliberate harm to individuals, public safety, and national security. USAISI announced agreements that enable formal collaboration on AI safety research, testing and evaluation with both Anthropic and OpenAI. Each company's Memorandum of Understanding establishes the framework for the USAISI to receive access to major new models from each company prior to and following their public release. The agreements will enable collaborative research on how to evaluate capabilities and safety risks, as well as methods to mitigate those risks.

NIST released an initial public draft of *Guidelines for Evaluating Differential Privacy Guarantees* (NIST SP 800-226) for public comment. This report is intended to help agencies and practitioners better understand how to evaluate promises made when deploying differential privacy, including for privacy-preserving machine learning.

NIST awarded $6 million to Carnegie Mellon University (CMU) to establish a joint center to support cooperative research and experimentation for the test and evaluation of modern AI capabilities and tools. The center will be housed on the Carnegie Mellon campus, in Pittsburgh. The CMU/NIST AI Measurement Science and Engineering Cooperative Research Center will seek to advance AI risk management practices and evaluation approaches through stakeholder partnerships and translate assessment capabilities and methodologies into practice.

Quantum Information Science
The International Electrotechnical Commission (IEC) and the International Organization for Standardization (ISO) approved the formation of a new Joint Technical Committee (JTC) on Quantum Technologies, managed by the British Standards Institution (BSI) as Secretariat and chaired by a representative of the Republic of Korea. The American National Standards Institute (ANSI) selected NIST as administrator of the U.S. National Committee (USNC) TAG to ISO-IEC/JTC3 *Quantum technologies*.

Researchers at Joint Institute for Laboratory Astrophysics (JILA), a joint institution of NIST and the University of Colorado Boulder that delves into cutting-edge research in physics and quantum information science and technology, developed an atomic clock that is more precise and accurate than any clock previously created. Additionally, an international research team led by scientists at JILA demonstrated key elements of a nuclear clock. Nuclear clocks could be much more accurate than current atomic clocks, which provide official international time and play major roles in technologies and applications such as GPS and internet synchronization, and in financial transactions.

Biotechnology
NIST entered a two-year cooperative research agreement with the nonprofit Engineering Biology Research Consortium (EBRC) to develop screening and safety tools to defend against the potential misuse of AI related to nucleic acid synthesis. Researchers have used synthetic nucleic acids to achieve groundbreaking biotechnology innovations, such as new drugs and therapies, but the growing availability and ease of synthesizing nucleic acids has raised safety concerns—particularly with advances in AI—that could pose risks to the public, environment, and national security. The partnership between NIST and EBRC aims to identify and describe the necessary infrastructure for ensuring safety and security in the synthesis of nucleic acids.

To begin creating standards and testing protocols for a new generation of breathalyzers that can diagnose malaria and tuberculosis (TB), NIST signed a cooperative research and development agreement (CRADA) with the Bill and Melinda Gates Foundation. Under this CRADA, NIST researchers will launch a new effort to develop tools and techniques to ensure that the breathalyzers are accurate and reliable. This effort will be vital if these tools reach the market and are deployed across the developing world.

The Rapid Drug Analysis and Research (RaDAR) project is part of NIST's ongoing effort to help efficiently and safely detect and identify synthetic opioids and other emerging substances of concern as part of an effort to better inform public health agencies in several states. In 2024, NIST started monthly RaDAR Newsletters that are disseminated to public health communities and can be found here.

NIST and the Food and Drug Administration led a joint workshop on regenerative medicine. The event in November 2023 focused on gene delivery systems, genome editing, and flow cytometry, to provide a unique opportunity for intense engagement across academia, government, and industry. These consortia have the goal of developing precompetitive technologies, measurement solutions, and standards to accelerate development and translation.

Advanced Communications
NIST, in collaboration with the National Science Foundation (NSF), published the Next Generation Communications Research and Development Gaps Report. This report highlights the major technology gaps that researchers and development organizations could focus on to drive long-term innovation in Next Generation (NextG) technology across key verticals such as hardware, higher frequencies, joint communications, sensing, and energy-efficient networks. Additionally, the NIST Smart Cities program led an American delegation to the World Cities Summit (WCS) in Singapore to discuss areas of mutual interest related to smart cities and communities through the bilateral U.S.-Singapore Critical and Emerging Technology Dialogue.

Standards Development
The Biden-Harris Administration released the NIST-developed U.S. Government National Standards Strategy for Critical and Emerging Technology (USG NSSCET) Implementation Roadmap, which includes recommendations and actions to implement the strategy, along with a fact sheet about the roadmap. NIST also participated in a summit at the White House where representatives of government agencies, industry and standards development organizations discussed the USG NSSCET. This strategy promotes technologically sound standards that help American industry compete internationally on a level playing field and is intended to support and complement existing private sector-led standards activities. More information can be found here.

NIST's Standards Coordination Office announced a funding opportunity for eligible applicants to establish and maintain a Standardization Center of Excellence. The entity will be a public-private partnership through a cooperative agreement that will support American engagement in international standardization for CETs, which are essential to American economic competitiveness and national security. The funding opportunity includes one award of up to $6 million for the first two years of the award, then up to $3 million per year for up to three additional years. The funding opportunity anticipates one award of up to $6 million for the first two years of the award, then up to $3 million per year for up to three additional years.

Technology Transfer
The NIST Technology Partnerships Office (TPO) released the FY 2023 Technology Partnerships Office Yearbook. This report highlights the licensed technology, patents issued, CRADAs executed, and invention disclosures during FY 2023 through the TPO. NIST awarded more than $1.2 million to 12 small businesses in eight states under the Small Business Innovation Research (SBIR) Program. The awards will fund research and development of new products relating to cybersecurity, quantum computing, health care, semiconductor manufacturing and other critical areas. Information on the awardees can be found here. NIST also awarded nearly $3 million to 15 small businesses in nine states under SBIR Program. This funding will go to research, development, and commercialization projects to support a variety of technology-based programs such as advances in semiconductors, drug development and flexible electronics manufacturing. Information on the awardees can be found here.

Bureau of Industry and Security (BIS)

In FY 2024, BIS built on its work in FY 2023 by calibrating export controls to ensure American leadership in international standards setting activities. In FY 2023, BIS established a narrow carve-out in its regulations to allow for the release of certain low-level technology and software, including related to telecommunications, to entities of national security and foreign policy concern, provided the release was in the context of a standards setting activity. In FY 2024, BIS expanded the carve-out in its regulations to remove all restrictions on the release of certain low-level technology and software in the context of certain standards setting activities where the resulting standard is intended to be published. This regulatory revision supports American leadership to establish international standards.

National Technical Information Service (NTIS)

NTIS provides innovative data services to federal agencies, through agile partnerships with the private sector, to advance federal data priorities, promote economic growth, and enable operational excellence. NTIS's data-centric mission helps Federal programs scale their capacity quickly through NTIS's partnership with those that include some of the brightest data science minds in the nation.

- NTIS partnered with the U.S. Agency for International Development (USAID) under the President's Malaria Initiative (PMI) to develop and refine the prototype for the Malaria Data Integration and Visualization for Eradication (M-DIVE) platform. This project aims to tackle cross-sector and interdisciplinary questions using diverse data sources.
- NTIS supported the Office of the Program Accountability and Risk Management (PARM) and delivered a completed proof of concept to culminate into a production-ready analytic product platform version, Acquisition Program Health Assessment (APHA), in conjunction with the Department of Homeland Security (DHS).
- NTIS worked with the Health Resources and Services Administration (HRSA) in Phase 3 to enhance its data management and reporting by developing and testing a new Uniform Data System (UDS) and UDS+ data validation and aggregation packages.
- At the FDA, Center for Drug Evaluation and Research (CDER), Bioresearch Monitoring (BIMO), NTIS is supporting the CDER BIMO Information Tracking Environment (CBITE) project to centralize the user experience, reduce duplicative work, streamline and enhance the existing BIMO workflows to maximize efficiency, and collect and integrate necessary data for deeper analysis, decision making, and reporting.
- NTIS officially started the assessment phase for the project to modernize the U.S. Trade and Development Agency's (USTDA) data management systems, tackling efficiency, decision-making, service delivery, and future adaptability challenges. Deliverables include blueprints for data models, plans for streamlining workflows, automating processes, facilitating information sharing, and developing dashboards, interfaces, and analytics tools.
- In collaboration with USAID, NTIS works with the Global Health Security (GHS)/Emerging Threats Division (ETD) to embark on an initiative to create an advanced data management system designed with the capabilities to conduct comprehensive cross-sector and interdisciplinary analyses. This system will significantly enhance the agency's capacity to respond proactively and effectively to global health challenges, fostering improved decision-making and strategic planning.
- NTIS is partnering with the U.S. Department of Health and Human Services (HHS), Office of the Inspector General (OIG), on the Tools Reimagined Ecosystem for Health Care Fraud and Abuse Control Phase II Project. This project aims to support the migration of the Centers for Medicare and

Medicaid Services (CMS) by designing innovative solutions. These solutions will be based on best practices in Development, Security, and Operations (DevSecOps), Data Operations (DataOps), Machine Learning Operations (MLOps), and the use of the Amazon Web Services (AWS) cloud environment.

- NTIS entered into an inter-agency agreement with the National Institute of Standards and Technology (NIST), Technology Partnerships Office (TPO) to develop innovative data solutions to address critical data needs and challenges particularly related to the transfer of federal technology. NTIS personnel will work together with one or more joint venture partners, selected from a network of private sector and nongovernmental entities to develop the solution. The overall goal of this project is to provide the tools to allow NIST TPO to become more efficient, effective, responsive, proactive, collaborative, and strategic in most efficiently increasing the impact of innovation programs and efforts by focusing on making better data-driven decisions.

International Trade Administration (ITA)

ITA strengthened the development of American Critical and Emerging Technology (CET) industries by promoting technological leadership in global markets, advancing a policy and regulatory framework that facilitates competitiveness and protecting American technological advantages and supply chains. This included domestic and international activities to enhance competitiveness in a range of products from fifth generation (5G) to AI with a diverse array of global partners. For example, in March 2024, ITA worked with the Wireless Infrastructure Association to organize a series of presentations and networking opportunities with industry representatives and government officials that provided a platform for discussion on technology standards for the cellular network regulatory environment in South Africa, laying groundwork for more streamlined regulatory processes and support for 5G deployment. ITA partnered with industry to deploy next-generation technologies at one of Thailand's leading public teaching hospitals. This pilot brings Thailand into closer alignment with the U.S. on spectrum policy, open business opportunities for American companies, and counter malign influence in Thailand's digital ecosystem. The pilot launched during the Secretary's visit to Thailand in March 2024. Additionally, ITA led 12 American companies on the Clean EDGE and Environmental Technologies Business Development Mission to India and co-hosted a U.S.-India Innovation Handshake event that strengthened commercial relationships among tech startups, venture capital firms, and other stakeholders.

ITA developed a CET strategy that focuses on the development and dissemination of market intelligence to help the American private sector gain and hold dominant market share in key CET sectors and technologies overseas. The Secretary of Commerce, along with ITA leadership and the U.S. Patent and Trademark Office, visited the United Arab Emirates (UAE) to promote CET investments in the United States and highlight America's prominent leadership in the AI domain at the Dubai World Government Summit. ITA likewise engaged with its counterparts during the Intercessional Meetings of the U.S. Singapore Critical and Emerging Technology Dialogue. ITA launched a quantum portfolio to lead efforts to advance the burgeoning American quantum industry. In support of this work, ITA actively participated in the plenary session of the Quantum Economic Development Consortium, demonstrating U.S. Government's support for the quantum industry while highlighting ITA resources available to small and medium-sized enterprises (SMEs) in the sector. ITA also examined the quantum supply chain in an in-depth analysis conducted in partnership with the Office of Information Communications Technology and Supply Chain Center (SCC) to ascertain potential weaknesses in the American quantum supply chain.

ITA engaged with over a dozen foreign governments to amplify *Executive Order 14110: Safe, Secure and Trustworthy Development of AI*, seek alignment with the American approach to AI governance, and increase competitiveness and adoption of American AI technology. ITA's collaboration with foreign counterparts include:

- Bilateral engagements to underscore the value of foundational principles of responsible AI development and deployment, such as the Organization for Economic Co-operation and Development (OECD) Principles on AI and the Hiroshima Process International Code of Conduct for Organizations Developing Advanced AI Systems.
- Encouraging the use of international standards and amplifying tools, frameworks, and best practices developed by the Department, such as the NIST AI Risk Management Framework and the recommendations from the National Telecommunications and Information Administration (NTIA) for AI accountability and use of open foundation models. For example, ITA led coordination efforts on the U.S.-India initiative on Critical and Emerging Technology (iCET) to engage with the Government of India on AI governance and share tools and best practices developed by colleagues at NIST, NTIA, and the U.S. AI Safety Institute. ITA similarly worked with Brazil, Costa Rica, Uruguay, and Peru on AI policy and draft legislation on their development of AI governance frameworks. The Department also entered into Memoranda of Understanding with the Governments of Uruguay, Nigeria, and Kenya on critical and emerging technologies, which include collaboration on AI to achieve further alignment on approaches to governance and related technology that will enhance American AI industry competitiveness in those countries.

Economic Development Administration (EDA)
In FY 2024, as part of Phase 2 of the Tech Hubs program, EDA awarded $504 million in implementation funds to 12 designated Tech Hubs to scale up the production of essential technologies, create employment opportunities in innovative sectors, and accelerate the growth of future industries throughout the United States. These Tech Hubs are focused on technologies and innovation critical to our economy and national security, such as maintaining our quantum edge, advancing biotechnology, regaining leadership in semiconductor manufacturing, among other needs. The Elevate Quantum Tech Hub received $40.5 million to strengthen its region's global position in quantum information technology, advancing areas like AI, climate technology, and healthcare. According to the Hub, this investment is expected to create over 10,000 quantum jobs, leverage $2 billion in capital, and generate nearly $20 million in broader economic income by 2030. EDA worked with Build Back Better Regional Challenge (BBBRC) grantees who are implementing projects that foster innovation in emerging technologies and supporting projects that drive regional economic growth. Lastly, The BBBRC Community of Practice, led by RTI International and SSTI, worked to enhance collaboration and share best practices among coalitions, further amplifying the impact of these initiatives. Through these efforts, EDA is fostering the growth of critical and emerging technologies and strengthening the competitiveness of the nation's research and development ecosystem.

Minority Business Development Agency (MBDA)
In FY 2024, MBDA signed a Memorandum of Understanding (MOU) with National Aeronautics and Space Administration (NASA) to raise awareness of programs and extend their collective reach. Key initiatives included:

- Networking and Capacity Building: MBDA facilitated workshops, and networking events with NASA representatives to connect Minority Business Enterprises (MBEs) with NASA scientists and technology managers. NASA participated in several MBDA led events aligned with *Executive Order*

13985: Further Advancing Racial Equity and Support for Underserved Communities Through The Federal Government and the promotion of equity in procurement.

- Identifying opportunities to increase the number of MBEs participating in the aerospace and science sectors: MBDA collaborated with NASA to increase outreach to MBEs about how to do business with NASA for contracts, grants, and cooperative agreements. MBDA facilitated introductions between NASA and MBDA-funded technical assistance operators, including Business Centers and other programs such as the Tribal Programs and the Entrepreneurship Education at Minority Colleges and Universities Program.

MBDA partnered with USPTO on several initiatives, such as:

- IP Education and Training: Through USPTO workshops and MBDA-hosted events, MBEs learned about patent, trademark, and copyright protections, enabling them to safeguard their technologies and ideas.
- Accelerated Patent Processing: Programs like USPTO's Track Online initiative allowed for expedited examination of patent applications, helping MBEs bring their innovations to market more quickly.
- Pro Bono Assistance: MBDA provided information to its national network of technical assistance program operators on resources such as USPTO's Patent Pro Bono Program, which offers free legal help to financially underserved inventors and small businesses.

These collaborations not only drove innovation in critical and emerging technologies but also empowered MBEs to play a significant role in the Nation's technological ecosystem. The resulting innovations contribute to economic growth, technological advancement, and increased competitiveness on a global scale.

- The MBDA Capital Readiness Program, that is operated by the Arizona Hispanic Chamber of Commerce, had two MBEs that were selected to participate in a major tech event, the Consumer Electronics Show (CES).
- During this fiscal year, MBDA supported a woman-owned MBE client that was selected by the National Science Foundation to tutor people on how to use crypto currency with artificial intelligence.

Performance Indicator Results

Class	Operating Unit	Performance Indicator	FY 2020 Actual	FY 2021 Actual	FY 2022 Actual	FY 2023 Actual	FY 2024 Actual	FY 2024 Target	FY 2024 Status
Current/ Recurring	NTIS	Total investment by the Federal Government on new public-private projects (or Government- Industry projects) entered into under the Joint Venture Authority per year	$20.80 M	$27.93 M	$37.86 M	$45.00 M	$74.36 M	$52.00 M	Exceeded
Current/ Recurring	NIST	International Adoption of NIST Quantum SI Standards	8	12	20	25	35	32	Exceeded
Current/ Recurring	NIST	Number of U.S. Government staff trained to effectively coordinate, participate, and influence technical standards development	—	—	1,050	475	1,046	600	Exceeded
Current/ Recurring	NTIS	Yearly average number of days required to complete public-private projects (or Government- Industry projects) entered into under the Joint Venture Authority	104	97	106	115	104	85	Not Met
Current/ Recurring	NIST	Number of participants at outreach events, hosted by NIST to identify opportunities for engagement and influence in critical and emerging technology standards development	—	—	280	500	506	500	Exceeded
Current/ Recurring	NTIS	Number of new public-private projects (or Government-Industry projects) entered into under the Joint Venture Authority per year	13	14	21	17	17	15	Exceeded
Current/ Recurring	NIST	Number of businesses using NIST research facilities	530	492	525	655	1,002	400	Exceeded

Strategic Conclusions

The Department made substantial progress to accelerate innovation in critical and emerging technologies through multiple avenues and with efforts across multiple operating units. NIST's emphasis and research focus on multiple CET's and standards development increases overall American competitiveness in these areas. BIS enhanced its export control policies to promote American leadership in international standards setting. NTIS collaborated with federal agencies and private sector partners to advance data priorities, enhance operational efficiency, and promote economic growth. ITA advanced American leadership in CET by fostering global competitiveness, supporting favorable policies and regulations, and protecting U.S. supply chains. EDA awarded $504 million to 12 Tech Hubs as part of Phase 2 of the Tech Hubs program, with the aim to scale essential technology production, create innovation-driven jobs, and spur the growth of future industries in the U.S.

The United States needs to further invest in R&D and standardization efforts to maintain technological leadership in the face of international competition and to support U.S. national security. Furthermore, the Department needs to support the modernization and upkeep of the facilities that drive these efforts, like those found on the NIST campuses. Without taking these steps, the U.S. may struggle to maintain its leadership in critical and emerging technologies.

STRATEGIC OBJECTIVE 1.3 – Increase international cooperation and commerce

Lead Operating Unit: ITA
Contributing Operating Units: BEA, Census, EDA, MBDA, NIST, NTIA

Key Strategies:
- Deepen economic engagement with allies and partners to promote a resilient, inclusive, and sustainable global economy
- Increase U.S. exports by broadening access to the Department's network, programs, and services for U.S. small and medium-sized businesses with a focus on the Nation's underserved communities
- Assist U.S. exporters seeking foreign government contracts or projects, and address policies or actions by foreign governments that impede the exports of U.S. goods and services
- Attract job-supporting foreign direct investment (FDI) into the United States

Executive Summary of Progress

International Trade Administration (ITA)
ITA assisted 98,965 clients through digital and traditional channels and facilitated nearly $161 billion in American exports and inward investment. This supported nearly 519,835 American jobs through export and inward investment promotion functions as well as Commercial Diplomacy and Advocacy to level the playing field for American businesses, ensure access to foreign markets, and counter foreign-sponsored competition. Of its total clients assisted, ITA directly assisted 43,338 American exporters with nearly 190,000 inquiries, 81 percent of which were small- and medium-sized enterprises (SMEs). ITA's Advocacy Center facilitated 125 contracts signed by American exporters pursuing foreign government procurement opportunities following successful advocacy campaigns. The value of these contracts exceeded $72.5 billion and supported more than 320,000 American jobs. ITA's SelectUSA reached a new milestone and facilitated over $250 billion in client-verified foreign direct investment (FDI), supported more than 230,000 jobs throughout the United States and its territories since the SelectUSA program was established in 2011. The 2024 SelectUSA Investment Summit marked the tenth and largest summit to date, with over 5,000 attendees from 96 international markets and 56 states and territories. This year's summit directly impacted over $130 billion in American investment projects which supports more than 100,000 jobs across the United States and its territories. ITA assisted more than 10,700 unique investment clients, both foreign investors and American economic development organizations, which led to 199 investment deals valued at over $51 billion and supported nearly 35,000 American jobs.

ITA supported several initiatives to increase international cooperation on trade related issues, such as the U.S.-Brazil Commercial Dialogue, the Commercial Issues Working Group with China, U.S.-European Union (EU) Trade and Technology Council Ministerial, the African Growth and Opportunities Act Forum, Japan-U.S. Commercial and Industrial Partnership Ministerial Meeting, and the U.S.-Singapore Partnership for Growth and Innovation Ministerial Meeting. ITA also facilitated engagement with the business community to strengthen commercial ties globally.

Strategic Goal 1: Drive U.S. Innovation and Global Competitiveness

The Secretary of Commerce led members of the President's Export Council to Thailand and 20 American companies and two nonprofits to the Philippines and convened the twelfth Plenary of the U.S.-Brazil CEO Forum to strengthen economic relationships in critical sectors. ITA hosted the fourteenth annual Trade Winds in Istanbul, Turkey, the U.S. Government's largest annual trade mission and business development forum. ITA led over 120 American businesses to a three-day business forum and trade missions, which resulted in 763 business-to-government meetings with American commercial diplomats and trade experts based in over 30 countries and 538 business-to-business meetings with potential buyers, distributors, and partners. ITA advanced American competitiveness and identified strategic opportunities to promote American scanner technology solutions with the European Commission, which committed $1 billion for member state customs scanning equipment purchases through 2027. ITA also promoted the procurement of American security scanners to Latin American trading partners. ITA industry experts collaborated with the Gulf Standards Organization to create a better understanding of the U.S. automotive regulatory process and prevent barriers for American exports to Gulf Cooperation Council member countries. For example, recent commitments from United Arab Emirates and Oman on electric and autonomous vehicles allow American industry opportunities to compete in these markets with an estimated total market value of $500 million by 2030 which supports over 10,000 jobs. ITA experts highlighted issues in electronic payment services that resulted in the first approval by the People's Bank of China for a foreign license application to establish a bank card clearing institution in the People's Republic of China.

ITA administered the Data Privacy Framework (DPF) program, which enables more than 3,000 participating organizations to claim sufficient data protection required for the transfer of personal data in accordance with European data privacy law. This program streamlined an affordable means of compliance which facilitated trade with many EU businesses. The DPF is of particular importance to SMEs, accounting for more than 70 percent of its participants. In January 2024, ITA launched an updated version of the DPF program database and public-facing website, which enhanced account management capabilities for participating American companies and increased capabilities to process self-certification applications, withdrawals, and compliance reviews. In July 2024, ITA hosted the first review of the program. The review featured remarks from the Secretary of Commerce and engagement with partners across the U.S. Government, the EU, and private sector. This review provided an opportunity to verify that the different elements of the framework were in place and function effectively. ITA leads American participation in the Global Cross-Border Privacy Rules (CBPR) Forum, which promotes international cooperation on data privacy and protection and facilitates cross-border data flows that underpin international commerce. In April 2024, the Global CBPR Forum announced three new Members of the Global Cooperation Arrangement for Privacy Enforcement, a multilateral arrangement for privacy enforcement authorities to facilitate cross-border enforcement of data protection and privacy laws. New members include: the Office of the Privacy Commissioner of Bermuda, the Office of the Commissioner of Data Protection of the Dubai International Financial Center Authority, and the United Kingdom Information Commissioner's Office. In May 2024, ITA co-hosted a multilateral workshop on the Global CBPR Forum with the Government of Japan that included government officials and data privacy enforcement authorities from 34 jurisdictions. In August 2024, the Global CBPR Forum added three new associate members: Mauritius, the Dubai International Financial Centre, and Bermuda. In September 2024, ITA participated in a three-day workshop co-hosted by the Indian government and industry on the Global CBPR Forum, which included representatives from 10 jurisdictions and focused on efforts to further international cooperation with India on data privacy and protection.

ITA led and coordinated the operationalization of the four Indo-Pacific Economic Framework (IPEF) agreements for the U.S. Government: the Supply Chain Agreement, the Clean Economy Agreement, the Fair Economy Agreement, and the overarching Agreement on IPEF. In February 2024, the Supply Chain Agreement entered into force and at the June 2024 IPEF ministerial meeting in Singapore, IPEF partners participated in a signing ceremony for the

Clean Economy Agreement, Fair Economy Agreement, and an overarching Agreement on IPEF which will establish a formal ministerial-level process to oversee IPEF's Pillars. ITA also worked closely with the Department's leadership and Singapore's Ministry of Trade and Industry to successfully hold the inaugural IPEF Clean Economy Investor Forum in Singapore under the IPEF Clean Economy Agreement. This event brought together IPEF ministers and government officials, leading global investors from the U.S. and other countries, and project proponents where over $32 billion in priority project opportunities were identified.

Bureau of Economic Analysis (BEA)

In FY 2024, BEA produced meaningful statistics to measure the role of the United States in the global economy. These statistics include monthly estimates of U.S. international trade that are produced jointly with the Census Bureau, quarterly estimates of the U.S. international investment position and international transactions, and annual estimates of the activities of multinational enterprises. BEA also participated in United Nations, Organisation for Economic Co-operation and Development, and International Monetary Fund working groups related to services trade and international investment.

Additionally, BEA improved its existing statistical products and introduced new products. In FY 2024, BEA improved statistics on international investment. BEA expanded detail on the U.S. international investment position, introduced new data sources to increase the accuracy of international portfolio investment statistics, and produced the first-ever measures of U.S. direct investment abroad by ultimate host economy. These last statistics allow users to "look through" the complex ownership chains of U.S. multinational enterprises to understand the link between investment and production activity.

Census Bureau

In March 2024, the Census Bureau finalized a press release for the trade reconciliations with the U.K. to better understand trade asymmetries and are working to evaluate Census data for future asymmetry analyses. Census also engaged with Statistics Canada to improve the U.S.-Canada data exchange and agreement. In FY 2024, Census actively participated in the United Nations Statistics Division and OECD working groups related to goods and services. Additionally, the Census provided guidance and best practices to organizations on data collection, use of data tools, and new export opportunities.

Economic Development Administration (EDA)

In FY 2024, EDA completed Phase 2 of the Tech Hubs program, in which 31 hubs competed for implementation grants to fund projects such as business and entrepreneur development, technology maturation and development, workforce development, and more. EDA selected 12 hubs for a total of $504 million in implementation awards. A key requirement for these applications was equity and diversity. The application required detailed plans to engage underserved and underrepresented communities, including through new career paths, apprenticeships, business opportunities, and more, to ensure broader access to the program and its benefits.

EDA worked with all 11 Trade Adjustment Assistance Centers (TAACs) funded under the Trade Adjustment and Assistance for Firms program. These centers provided expert technical assistance to import-impacted firms, to help them create business recovery plans and become more globally competitive. TAACs also offer tailored support to address specific challenges faced by these firms, such as market diversification and operational efficiency. Through these efforts, EDA created jobs and ensured that businesses not only recover but thrive in the global market.

Exports and Foreign Direct Investment (FDI) remain investment priorities for EDA. EDA invested over $32.2 million in projects to boost American exports and nearly $50 million in projects aimed at attracting FDI. These strategic investments not only create jobs in the communities and regions EDA serves but also bolster economic growth and resilience, ensuring long-term prosperity.

Minority Business Development Agency (MBDA)
In FY 2024, MBDA worked to promote export as a business growth strategy for minority business enterprises (MBEs). MBDA's four export Business Centers engaged and provided training, technical assistance, and facilitated access to capital for socially and economically disadvantaged entrepreneurs that seek to or operate enterprises in international markets. MBDA supported nearly one thousand MBEs in global trade through its four Export Centers located in Mesa, Arizona; Miami, Florida; and Houston and San Antonio, Texas. In FY 2024, these centers helped MBEs to secure over $260 million in contracts and revenues, which resulted in more than 900 jobs retained and/or created. MBDA strengthened its partnerships with ITA's Global Diversity Export Initiative, network of U.S. Export Assistance Centers, as well as other external organizations.

MBDA also collaborated with other stakeholders to promote and support MBEs in global trade. In late October 2023, MBDA participated in the U.S. Hispanic Chamber of Commerce trade mission to Mexico City and Guadalajara, Mexico, to expand markets for MBEs. The delegation included nearly 20 MBEs searching for international business-to-business and business-to-consumer opportunities. In support of the Department's Africa strategy, MBDA partnered with ITA to support MBE access to the South Africa Pro Beauty and Personal Care Opportunities initiative (SAPCO). SAPCO supports American cosmetics and personal care companies to increase their capacity to access market opportunities in South Africa. MBDA also participated in the ITA's Building Bridges to Global Markets program.

National Institute of Standards and Technology (NIST)
In May 2024, the Secretary of Commerce released a strategic vision at the AI Seoul Summit for the U.S. Artificial Intelligence Safety Institute (AISI), describing the Department's approach to AI safety under the President's leadership. During the Summit, the Secretary of Commerce shared the Department's plans to work with a global scientific network for AI safety through meaningful engagement with AI Safety Institutes and other government-backed scientific offices.

The U.S. and U.K. signed a Memorandum of Understanding (MOU) to work together to develop tests for the most advanced AI models, following through on commitments made at the AI Safety Summit in November 2023. Signed by the Secretary of Commerce and the U.K. Technology Secretary, the partnership will increase collaboration between the two countries to align their scientific approaches to accelerate and rapidly iterate robust suites of evaluations for AI models, systems, and agents. The U.S. and U.K. AI Safety Institutes have laid out plans to build a common approach to AI safety testing and to share their capabilities to ensure these risks can be tackled effectively.

The Administration released the NIST-developed U.S. Government National Standards Strategy for Critical and Emerging Technology (USG NSSCET) Implementation Roadmap, which includes recommendations and actions to implement the strategy, along with a fact sheet about the roadmap. NIST also participated in a summit at the White House where representatives of government agencies, industry and standards development organizations discussed the USG NSSCET. This strategy promotes technologically sound standards that help American industry compete internationally on a level playing field and is intended to support and complement existing private sector-led standards activities.

NIST's Standards Coordination Office announced a funding opportunity for eligible applicants to establish and maintain a Standardization Center of Excellence. The entity will be a public-private partnership through a cooperative agreement that will support U.S. engagement in international standardization for Critical and Emerging Technologies (CETs), which are essential to American economic competitiveness and national security. NIST anticipates funding one award of up to $6 million for the first two years of the award, then up to $3 million per year for up to three additional years.

Performance Indicator Results

Class	Operating Unit	Performance Indicator	FY 2020 Actual	FY 2021 Actual	FY 2022 Actual	FY 2023 Actual	FY 2024 Actual	FY 2024 Target	FY 2024 Status
Current/ Recurring	ITA	Percentage of U.S. exporter clients that achieved their export objectives	80%	84%	89%	89%	90%	85%	Exceeded
Current/ Recurring	ITA	Number of Investment Promotion Written Impact Narratives	115	155	181	179	199	130	Exceeded
Current/ Recurring	ITA	Number of investment clients assisted	6,921	11,721	9,932	10,350	10,636	9,900	Exceeded
Current/ Recurring	ITA	Number of underserved community clients assisted	—	—	6,447	10,120	6,876	6,200	Exceeded
Current/ Recurring	ITA	Number of Commercial Diplomacy/Advocacy Written Impact Narratives	575	578	559	597	552	470	Exceeded
Current/ Recurring	ITA	Number of U.S Exporters Assisted (non-digital)	31,249	31,526	32,520	32,644	33,647	31,500	Exceeded
Current/ Recurring	ITA	Percentage of U.S. Exporter Clients that are Small and Medium-Sized Enterprises	86%	86%	85%	85%	81%	80%	Exceeded

Strategic Conclusions

The Department demonstrated progress in economic engagement, assistance to American exporters, and inflows of FDI. ITA successfully broadened and strengthened its outreach and assistance to American exporters and investment clients and increased the number of facilitated foreign government actions. These actions benefited American companies and emphasized tailored assistance to SMEs and disadvantaged businesses.

By supporting and leveraging cultural affinities, multilingual skills, and strong international ties of MBEs to enhance their participation in global markets, the Department can increase international cooperation and commerce. Data show that MBE exporters have more employees, higher productivity and share of receipts from goods or services when compared to non-MBE exporters. MBEs also have a comparative advantage relative to other non-MBEs that allow them to conduct more business in the countries in which they have ties, as shown in the case of Asian- and Hispanic-owned firms. These cultural relationships have helped MBE exporters overcome numerous barriers that prevent most other firms from doing the same.

STRATEGIC OBJECTIVE 1.4 – Protect national security interests and enforce trade rules

Lead Operating Unit: BIS
Contributing Operating Units: ITA, NIST

Key Strategies:
- Administer and enforce export controls and foreign investment restrictions to protect against inappropriate use of U.S. technologies
- Enforce U.S. antidumping and countervailing duty trade remedy laws
- Identify and protect emerging technologies essential to national security

Executive Summary of Progress

Bureau of Industry and Security (BIS)

BIS advanced U.S. national security, foreign policy, and economic objectives by ensuring an effective export control and treaty compliance system, and by promoting U.S. strategic technology leadership. BIS provides ongoing identification of items important to U.S. national security, including emerging and foundational technologies. BIS's efforts help maintain robust enforcement of controls, ensure that U.S. and foreign businesses understand and comply with the Export Administration Regulations (EAR) through ongoing education, and build coordination mechanisms among international partners that stop the export of sensitive items to malign actors. In FY 2024, BIS played a critical role to advance key national security and foreign policy priorities. BIS intensified its efforts to implement policies and conducted enforcement activities that address strategic national security and foreign policy threats. These threats include attempts by arms-embargoed countries, such as the People's Republic of China (PRC), Russia, and Iran, to obtain U.S. technology and commodities to improve their military capabilities and enable human rights abuses.

International Trade Administration (ITA)

ITA maintained its focus to enforce U.S. trade laws to defend American manufacturers, workers, and farmers from unfair trade throughout FY 2024 as well as monitor and ensure compliance with trade agreements, assess foreign direct investment impacts on national security, and improve international intellectual property (IP) protections. In April 2024, the Department's final regulations to improve and strengthen antidumping (AD) and countervailing duty (CVD) trade remedy enforcement went into effect. Each provision of these regulations is designed to strengthen the ability of the United States to counteract unfair trade practices and ensure that American businesses can compete on a level playing field. In public comments, labor unions and American manufacturers resoundingly endorsed three major policy initiatives that aimed to address serious problems that impact American industries: tackling transnational subsidies such as PRC's Belt and Road Initiative; addressing market distortions that undermine American manufacturers; and ensuring that weak labor, environmental, human rights, or IP protections abroad do not create an unfair advantage over American producers.

National Institute of Standards and Technology (NIST)

To protect emerging technologies essential to national security, NIST updated the widely used Cybersecurity Framework (CSF) which is a landmark guidance document for reducing cybersecurity risk. The new 2.0 edition is designed for all audiences, industry sectors and organization types. It will help the smallest schools and nonprofits to the largest agencies and corporations—regardless of their degree of cybersecurity sophistication. The CSF 2.0, which supports implementation of the National Cybersecurity Strategy, has an expanded scope that goes beyond protecting critical infrastructure, such as hospitals and power plants, to all organizations in any sector. It also focused on governance, which encompasses how organizations make and carry out informed decisions on cybersecurity strategy.

NIST was tasked with many deliverables in response to *E.O. 14110 on Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence*. Under the Executive Order, NIST created guidelines and benchmarks for evaluating AI capabilities which could cause harm such as cybersecurity and biosecurity. Artificial Intelligence achievements related to national security include:

- NIST launched the U.S. AI Safety Institute (USAISI). The USAISI is housed within NIST and is advancing the science, practice, and adoption of AI safety across the spectrum of risks, including those to national security, public safety, and individual rights. In tandem, the U.S. AI Safety Institute Consortium (AISIC) unites over 280 members including AI creators and users, academics, government and industry researchers, and civil society organizations in support of the development and deployment of safe and trustworthy artificial intelligence. The consortium works with organizations from likeminded nations that have a key role to play to develop interoperable and effective tools for safety around the world.
- NIST entered a two-year cooperative research agreement with the nonprofit Engineering Biology Research Consortium (EBRC) to develop screening and safety tools to defend against the potential misuse of artificial intelligence (AI) related to nucleic acid synthesis. Researchers have used synthetic nucleic acids to achieve groundbreaking biotechnology innovations, such as new drugs and therapies, but the growing availability and ease to synthesize nucleic acids have raised safety concerns. These concerns are driven by advances in artificial intelligence that could pose risks to the public, environment and national security. The partnership between NIST and EBRC aims to identify and describe the necessary infrastructure for ensuring safety and security in the synthesis of nucleic acids.

For CHIPS incentives, the CHIPS Program Office (CPO) reviewed applications for involvement of foreign entities of concern. The CPO did not approve any applications where a foreign entity of concern—through control, access to information, or other mechanisms—poses an undue risk to a project or to U.S. national security interests.

NIST released its first set of encryption tools that are designed to withstand cyberattacks from a quantum computer at a White House-hosted event. The standards contain the encryption algorithms' computer code, instructions for how to implement them, and their intended uses. They result from an eight-year effort managed by NIST, which has a long history of developing encryption. The NIST National Cybersecurity Center of Excellence (NCCoE) released a preliminary draft practice guide, NIST Special Publication (SP) 1800-38B, *Migration to Post-Quantum Cryptography*, for public comment.

Regulatory Actions

In FY 2024, BIS expanded export controls to counter Russia's ongoing aggression against Ukraine, and on Belarus for its complicity in the war. Building on measures implemented since February 24, 2022, BIS issued substantive updates focused on efforts to prevent circumvention of controls through third countries. In collaboration with allies and partner countries, BIS also updated the list of common high priority items restricted for export to Russia, to promote a multilateral and prioritized anti-circumvention approach to target countries that are not able to substantially align with broader export controls. BIS conducted educational outreach and provided guidance to industry to promote compliance. This guidance included partnering with other U.S. Government agencies and the Group of Seven (G7) partners), red flag letters about diversionary actors, lists of Russian suppliers in third countries of evasion risk, and imposition of license requirements on diverters through the Entity List and specific notices to exporters. BIS worked closely with allies and partners to prevent diversion through third countries and to encourage additional countries to join the multilateral efforts against Russia.

BIS conducted robust research, analysis, and engagement with key stakeholders pursuant to its statutory responsibilities under *Section 1758 of the Export Control Reform Act (ECRA) of 2018*. These statutory responsibilities include the identification and safeguarding of emerging technologies critical to national security through the judicious implementation of export controls. As a result of these efforts, BIS issued regulations to impose controls on additive manufacturing, quantum computing, and semiconductor manufacturing technologies. These controls, which were released in September 2024, follow similar restrictions imposed by other countries throughout FY 2024. This aligned approach of supplier countries ensures our controls are most effective to prevent adversary acquisition of sensitive technologies while placing American companies on a level playing field with industry in allied and partner countries. BIS's Export Administration also completed an internal reorganization in FY 2024, which formally established a new Emerging Technology Division, and entered a Memorandum of Understanding with a Department of Energy National Laboratory to support emerging technology analysis. These initiatives further advance and focus the operating unit's efforts on controlling critical technology.

During FY 2024, BIS assessed and updated export control policies related to advanced computing and semiconductor manufacturing equipment initially implemented in FY 2023. One national security concern BIS identified is the ability for adversaries to use large-scale artificial intelligence (AI) models and supercomputers to advance military modernization efforts and commit human rights violations. These advanced technologies have powerful computing capabilities and are built on advanced semiconductors. They are also critical to improve the design and use of weapons of mass destruction, advanced weapons systems, and high-tech surveillance. To address these threats, in FY 2024 BIS refined and expanded the significant restrictions on key semiconductor-related technologies it initially introduced in October 2022. Specifically, BIS adjusted technical control parameters for advanced AI chips and expanded the license requirement for such items to apply to over 40 additional countries, as well as PRC-headquartered companies around the world. These enhancements of the controls address diversion concerns. BIS further clarified the controls in April 2024.

To ensure sensitive technologies are not available to malign actors, BIS imposed additional export restrictions on certain entities identified pursuant to other agency authorities. Specifically, BIS released a final rule to impose additional restrictions on persons identified under 14 sanctions programs maintained by the Department of the Treasury's Office of Foreign Assets Control (OFAC). This alignment ensures individuals and entities are

automatically subject to stringent BIS export restrictions, strengthening the impact of sanctions by applying them to reexports by foreign parties of items under BIS but not OFAC control.

Finally, BIS released a rule that updates policies to restrict exports of firearms, ammunition, and related items to non-government entities in high-risk countries where a substantial risk of diversion or misuse exists. The updates are designed to increase scrutiny of license applications, deepen insight into trade flows, and increase transparency around firearms and related exports. BIS's mission is first and foremost to protect U.S. national security and foreign policy interests. For firearms and other related items, BIS seeks to prevent lawful U.S. exports from being diverted for terrorism, political violence, or any other malign purposes.

In FY 2024, ITA administered a historic 716 Antidumping and Countervailing Duties (AD/CVD) orders, covering products from 63 different trading partners. The number of AD/CVD orders administered by the Department increased by 57 percent in the last five years. ITA initiated 114 AD/CVD investigations in FY 2024 compared to 58 initiations five years ago in FY 2019. ITA made 771 AD/CVD determinations in FY 2024, compared to 504 in FY 2019. As the number of AD/CVD orders that cover unfairly traded foreign goods increases, so do the instances of circumvention and duty avoidance. ITA made 20 final circumvention decisions compared to five final decisions in 2019, a 300 percent increase from five years ago. In FY 2024, over 6.5 million pages were electronically filed in connection with AD/CVD proceedings, an increase of 2.5 million pages over the previous year. Verifications are investigative audits that examine the accuracy of information submitted by companies and governments to the Department in connection with AD/CVD proceedings. Required by law, verifications are inherent to the rigorous, analytical, quasi-judicial AD/CVD process. In-person verifications are especially important for providing investigators additional opportunities to detect mistakes or misrepresentations. In March 2020, ITA suspended in-person AD/CVD proceedings in PRC (the country with the largest number of U.S. AD/CVD orders) due to health, safety, and security concerns. In March 2024, ITA resumed its in-person verifications in PRC. ITA conducted 23 in-person verifications in PRC as well as over 430 in-person verifications in 27 other countries, including India, Germany, South Korea, Türkiye, and Vietnam.

Through its Trade Agreements Compliance Program, ITA successfully closed 38 compliance cases in FY 2024, protecting U.S. export opportunities by ensuring that foreign governments around the globe honor U.S. rights under multilateral, regional, and bilateral trade agreements. ITA worked with the United States Trade Representative and other interagency partners to orient standing World Trade Organization (WTO) Committees for compliance activities and sought strong, binding disciplines in key U.S. trade agreement negotiation activities outside of the WTO, including Indo-Pacific Economic Framework and the U.S.-Taiwan 21st-Century Trade Initiative. This fiscal year, ITA focused on efforts to evaluate and act on trading partners' compliance with baseline customs regime transparency commitments to assist with U.S. supply chain strength and integrity goals.

ITA's industry expertise is critical for U.S. national security, especially as it relates to providing a sectoral understanding and supply chain-related analysis when examining cases in the Committee on Foreign Investment in the United States (CFIUS). ITA served as the policy lead for the Department's efforts on CFIUS and played a leading agency role on the Committee. ITA examined 173 cases worth $196.9 billion. Additionally, ITA led the Department's work on 109 CFIUS declarations worth $32.9 billion. ITA implemented Foreign Investment Risk Review Modernization Act (FIRRMA) requirements through its CFIUS team. ITA's Office of Investment Security (OIS) coordinated the Department's inputs as a statutory member of CFIUS. OIS shared market analysis

and other industry-specific research for fellow agencies on CFIUS and build expertise in supply chain analysis. Along with inbound investment screening, ITA was the lead policy voice at the Department on outbound investment restrictions.

ITA supported Section 232 enhancement effort to improve the timeliness of decisions, reduce the number of staff needed to process requests, improve data transparency, and implement additional policy changes in support of BIS processes for requesting exclusions from the additional duties and quantitative limits on imports of aluminum and steel imposed under Section 232 of the Trade Expansion Act of 1962. ITA implemented and authorized the Trade Agreements Secretariat secure e-filing system that manages 17 disputes under the North American Free Trade Agreement (NAFTA) and the United States-Mexico-Canada Agreement disputes. These disputes involve 27 American companies and four Trade Associations and affects over 881,000 American workers and more than $10.5 billion in subject merchandise.

Enforcement Actions
During FY 2024, BIS investigations resulted in 67 criminal convictions and three new Temporary Denial Orders (TDOs) and 13 TDO renewals. BIS also worked with the Department's Office of Chief Counsel for Industry and Security to issue orders in 67 administrative enforcement matters and resolved five administrative antiboycott compliance cases. These enforcement actions collectively resulted in the imposition of $4,965,500 in criminal fines, $2,948,031 in forfeitures, $15,069,339 in restitution, 3,128 months of federal imprisonment, and $6,964,292 in administrative export control ($6,524,992) and antiboycott penalties ($439,300), demonstrating the significant legal consequences for non-compliance.

BIS expanded its enforcement scope through close collaboration with other government agencies and the private sector. A notable example from FY 2024 includes the successful prosecution of a significant fraud and export violation case involving a wire fraud conspiracy by individuals who diverted over $4.9 million worth of biochemical products from a company to PRC using falsified export documents. The company promptly self-disclosed the misconduct and provided exceptional cooperation. It was not prosecuted due to its proactive measures and collaboration with the Department of Justice (DOJ) and BIS. This case, involving millions of dollars in diverted goods, underscores BIS's ongoing commitment to maintain the integrity of U.S. export controls and protect national security by holding violators accountable.

To support enforcement, BIS co-led the Disruptive Technology Strike Force (DTSF) with DOJ to bring together criminal investigators and analysts from BIS, Federal Bureau of Investigation (FBI), and Homeland Security Investigations (HSI) to target bad actors, strengthen supply chains, and protect critical technologies from being illicitly acquired or used by nation-state adversaries. In FY 2024, the DTSF expanded to 17 U.S. Attorneys Offices in 15 metropolitan regions across the country and added the Defense Criminal Investigative Service (DCIS) as a formal partner. Since the founding of the DTSF, there have been 25 publicly charged cases and two individuals were sentenced in federal court to a combined 60 months involving alleged sanctions and export control violations, smuggling conspiracies, and other offenses related to the unlawful transfer of sensitive information, goods, and military-grade technology to Russia, PRC, or Iran. Additionally, more than 20 entities were added to the Entity List for their participation in the PRC's quantum technology advancements and for acquiring or attempting to acquire U.S. origin items to enhance the PRC's quantum capabilities. As part of the Strike

Force, BIS issued Temporary Denial Orders against 29 entities. On August 15, 2024, BIS imposed a $5.8 million penalty, against a Pennsylvania company for shipments of low-level items to parties tied to the PRC's hypersonics, unmanned aerial vehicles, and military electronics programs.

BIS, in conjunction with DOJ, officially launched the Disruptive Technology Protection Network (DTPN) with Japan and the Republic of South Korea with the signing of two memoranda of intent between the three countries in April 2024. This Network collaborates on efforts to keep potentially disruptive technologies out of the hands of bad actors. BIS worked with Australia, Canada, New Zealand, and the UK under the Export Enforcement Five (E5), and with the Group of Seven (G7) countries under an Enforcement Coordination Mechanism (ECM) to bolster the enforcement of multilateral sanctions and export controls aimed at denying Russia the inputs it needs to equip its military and the revenue necessary to fund its illegal war. In September 2024, the G7 ECM issued its first joint guidance for industry on preventing Russian export control and sanctions evasion to coincide with its one-year anniversary.

In FY 2024, BIS further strengthened its enforcement strategies by introducing significant enhancements to the Voluntary Self-Disclosure (VSD) program. These revisions focused on simplifying and expediting the disclosure process, leading to a substantial increase in the submission of high-priority VSDs. The updated VSD policy has been instrumental in encouraging more companies to self-disclose serious export control violations, reflecting the program's growing effectiveness. This focus on timely disclosures, paired with the risk of harsher penalties for non-compliance, has been pivotal in enhancing transparency and compliance across American industries. In September 2024, BIS published amendments to the EAR codifying these VSD changes and other changes to its administrative penalty guidelines.

Throughout FY 2024, BIS's Academic Outreach Initiative was instrumental in promoting export control compliance within academic institutions. BIS released a compliance note titled Trends in Voluntary Self-Disclosures Related to Academia to Inform Improvements to Export Compliance Plans, which highlighted common violations reported through VSDs over the past decade and provided universities with actionable guidance to address these issues, such as enhancing training programs and improving internal controls. BIS also published a Compendium of Resources for academic institutions to use to integrate export control best practices into their daily operations, thereby minimizing the risk of violations. Additionally, BIS conducted workshops, webinars, and on-site training for universities, utilizing case studies to demonstrate the consequences of non-compliance. These initiatives are central to BIS's broader strategy to secure research environments while protecting national security.

In FY 2024, BIS imposed over $435,000 in administrative penalties for violations of the antiboycott rules and published a boycott Requester List designed to alert American companies, financial institutions, freight forwarders, individuals, and other Americans of potential sources of certain boycott-related requests they may receive during the regular course of business.

Performance Indicator Results

Class	Operating Unit	Performance Indicator	FY 2020 Actual	FY 2021 Actual	FY 2022 Actual	FY 2023 Actual	FY 2024 Actual	FY 2024 Target	FY 2024 Status
Current/ Recurring	ITA	Percentage of antidumping and countervailing duty (AD/CVD) determinations issued within statutory and/or regulatory deadlines	99.5%	99.0%	97.0%	97.0%	100.0%	91.0%	Exceeded
Current/ Recurring	ITA	Number of trade agreement compliance cases resolved successfully	30	41	38	46	38	38	Met
Current/ Recurring	BIS	Number of exporters educated and trained through outreach activities	60,511	64,528	28,270	28,113	40,669	25,000	Exceeded
Current/ Recurring	BIS	Number of actions resulting in a deterrence or prevention of a violation, and cases resulting in a criminal or administrative charge	1,667	2,018	1,864	1,846	2,271	1,840	Exceeded
Current/ Recurring	BIS	Percent of licenses requiring Information Triage Unit (ITU) report completed by Export Enforcement (EE) within ten Executive Order (EO) days of referral	93%	94%	94%	93%	95%	90%	Exceeded
Current/ Recurring	BIS	Number of end-use checks completed	987	1,030	1,151	1,509	1,443	1,275	Exceeded

Strategic Conclusions

BIS remains committed to safeguarding critical technologies by evaluating the effectiveness of export controls. To address emerging challenges, BIS will identify gaps and adjust the controls to ensure it achieves relevant policy objectives. Regular updates to controls on advanced computing and semiconductor manufacturing items will enhance their relevance in a rapidly evolving technological landscape. Through close collaboration with interagency partners, BIS will target entities that pose national security or foreign policy risks, leveraging multilateral coordination to maximize the impact of restrictions while fostering a fair competitive environment for industry. BIS will investigate violations of U.S. export controls, including through the Disruptive Technology Strike Force, to reach criminal and administrative settlements. These efforts aim to reward compliance investments by responsible companies and universities while deterring non-compliance, particularly concerning advanced technologies sought by nation-state adversaries. Additionally, BIS will strengthen partnerships with industry to prevent violations and work with international counterparts to bolster enforcement capabilities globally.

STRATEGIC OBJECTIVE 1.5 – Promote accessible, strong, and effective intellectual property rights to advance innovation, creativity, and entrepreneurship

Lead Operating Unit: USPTO
Contributing Operating Units: ITA

Key Strategies:
- Improve equitable and affordable access to the IP system
- Enhance patent quality and compact prosecution
- Reduce trademark pendency and protect the integrity of the register
- Protect and enforce IP abroad

Executive Summary of Progress

United States Patent and Trademark Office (USPTO)
As America's innovation agency, USPTO understands the importance of delivering timely, efficient services that help innovators, creators, entrepreneurs, and brand owners bring their ideas to impact more quickly and efficiently. Robust and reliable patents and trademarks offer meaningful, enforceable intellectual property (IP) protection to those who hold them and those around them who operate in the same competitive landscape.

During FY 2024, USPTO significantly increased its outreach and engagement efforts to help Americans participate in the innovation and entrepreneurial ecosystem. USPTO made significant progress to advance opportunities for IP protection both in the United States and around the globe. An efficient and reliable IP system is critical to innovating, building brands, creating jobs, and solving problems, both here in the United States and around the world. This is why USPTO devotes more than two-thirds of its resources to patent and trademark examination, which directly supports this strategic objective. During FY 2024, USPTO focused on application pendency (i.e., time the agency requires to complete examination) to ensure the timely delivery of IP rights. A July 2024 update from the Office's Under Secretary of Commerce for Intellectual Property in collaboration with the Director of USPTO outlined current pendency challenges and measurable actions USPTO has taken to address them. USPTO is working diligently to maintain quality standards and exploring how the integration of advanced IT systems, including artificial intelligence (AI), can enhance its efficiency and quality goals.

Improve equitable and affordable access to the IP system
USPTO established the Office of Public Engagement (OPE) in FY 2024. OPE brings together the agency's national, regional, and community outreach offices; outreach functions performed in other business units; the Council for Inclusive Innovation (CI[2]); and Patent and Trademark Resource Centers (PTRCs) all under one umbrella. This centralization allows the OPE to amplify USPTO's nationwide outreach efforts, particularly in local and

underrepresented communities, via outreach, education, customer experience (CX), and customer engagement. Through this coordinated effort, USPTO can impact a greater number of innovators and reach new audiences. A few highlights from FY 2024 include:

- Announcing the new regional and community outreach offices:
  - Southeast Regional Outreach Office – USPTO announced Atlanta, Georgia as its future Southeast Office, which will serve Alabama, Florida, Georgia, Mississippi, North Carolina, Puerto Rico, South Carolina, and Tennessee.
  - New England Community Outreach Office – Strafford County, New Hampshire was selected as the location for the first of four such offices authorized by the Unleashing American Inventors Act of 2022 (UAIA). This community outreach office will support innovators in the New England region.
- In May 2024, USPTO released the National Strategy for Inclusive Innovation, a comprehensive national blueprint for growing the economy, creating quality jobs, and addressing global challenges through a dynamic and thriving innovation system. The strategy's four cornerstones for maximizing American prosperity lay the foundation for inclusive innovation, and 11 complementary recommendations will help schools, industry, and other organizations grow a 21st century innovation ecosystem. An appendix contains more than 70 best practices and example programs targeted to decision-makers, complete with descriptions and links to resources for developing successful inclusive innovation policies.
- USPTO's FY 2024 PTRC expansion efforts more than quadrupled the centers at historically black colleges and universities (HBCUs) and resulted in the founding of five new centers in previously underserved states, for a total of 99 active PTRCs as of year-end.
- The Patent Pro Bono Program is one of USPTO's primary pathways to the innovation ecosystem, with a network of regional programs that match volunteer patent professionals with financially under resourced inventors and small businesses. During FY 2024, USPTO surveyed regional pro bono programs and found that more African American or Black, Native American, Asian American or Pacific Islander, or participants specifying two or more races had applied to the program than ever before. A record number of women, Hispanics, and veterans also applied to regional patent pro bono programs during the year. In December 2023, USPTO delivered to Congress the UAIA - Study of the Patent Pro Bono Programs. This groundbreaking, comprehensive study found that regional patent pro bono programs are successfully meeting the needs of under resourced independent inventors and small businesses.
- As part of its commitment to expand access to the innovation ecosystem, USPTO announced a first-of-its-kind preapplication program, the Pre-Prosecution Pilot, in December 2023. The program supports under resourced inventors in accordance with UAIA directives. This free, two-day, virtual workshop assists inventors in assessing the strengths and weaknesses of their patent applications and offers instruction on searching public patent databases to determine whether their ideas are novel.

Enhance patent quality and compact prosecution

There has been an exponential growth in technology through the issuance of patents over the years. USPTO received 466,070 serialized patent applications (i.e., new patent filings) during FY 2024, an increase of 0.8% over FY 2023, and granted 327,405 patents, a 5.5% increase. The result was an increase in the unexamined application inventory. Unexamined application inventory in FY 2023 was 747,975 and in FY 2024 was 793,824, an increase of 40,849 applications.

Throughout FY 2024, USPTO addressed pendency with instrumental actions to benefit both its employees and stakeholders. First, USPTO increased the efficiency of routing for patent applications, improving the likelihood of initial assignment to examiners with relevant expertise. Second, USPTO extended examiner working hours, offering greater flexibility to enhance productivity. Third, USPTO secured an average 5.68% increase in the special rate table that sets the pay of its nearly 9,500 patent professionals—the first such adjustment in 15 years—to attract and retain employees. The U.S. Office of Personnel Management (OPM) has the authority to establish higher rates of basic pay, or special rates, to address existing or likely significant challenges to recruit or retain well-qualified employees. On April 30, 2024, USPTO received approval from OPM to increase the pay for patent examiners and other patent professionals through modification of Special Rate Table Number 0576. This affected approximately 9,500 employees and was effective June 2, 2024. This adjustment, combined with recruitment incentives and workplace flexibilities, enhanced USPTO's ability to recruit and retain the professionals it needs to meet mission demands more effectively and efficiently.

USPTO did not meet its FY 2024 key performance indicator target of 80% total patent term adjustment (PTA) compliance for mailed actions (i.e., office actions, or official letters mailed from patent examiners to applicants during patent prosecution) due to the impacts of a temporary software outage on its productivity. The software outage decreased USPTO's ability to generate first office actions in new, unexamined applications; therefore, the FY 2024 result was 79%. Likewise, USPTO did not meet its key performance indicator target of 81% for remaining inventory (i.e., cases awaiting action from the agency) because of this same impact, with the FY 2024 end year result of 80%.

USPTO recognizes that workflow optimization will play a key role in improving patent application pendency and compliance with PTA statutory time frames. To that end, USPTO is bringing more tools to examiners, including the use of AI to complement existing processes and programs. In fact, AI-powered search tools have proved particularly useful in assisting examiners in retrieving art, including foreign patent prior art, as evidenced by an approximate 10% increase in foreign patent document citations in AI-assisted examinations. Other FY 2024 patent initiatives included external customer surveys that gathered respondent opinions on patent examiners' ``adherence to rules and procedures; the correctness, clarity, and consistency of rejections; and overall examination quality. USPTO invited more than 6,500 randomly selected customers to participate; the resulting Quality Net Promoter Score (NPS), 53, exceeded the FY 2024 target of 50.

USPTO also established a research and development unit within Patents to test various new processes before launch across the examining corps. The unit has tested and evaluated a broad range of topics, including the use and effectiveness of information disclosure statements, interview summaries, and Rule 1.105 requests in examination processes. This testing will help the agency better understand how proposed process changes might affect quality, examination time, and pendency. Finally, the agency remains focused on enhancing application readiness, continuation practice, prior art (i.e., references or documents that may be used to determine patentability of claimed subject matter in a patent application), training, and prosecution changes to improve patent reliability. USPTO will assess its reliability and consistency efforts via the quality assurance program, which reviews a random sample of examiner work products to gauge timely, reliable, and meaningful indicators of examination quality. USPTO exceeded its FY 2024 patent quality targets:

Statute 35 U.S.C. 101, Inventions patentable (including utility and eligibility); target was 94%, and USPTO exceeded it at 98%.
Statute 35 U.S.C. 102, Conditions for patentability, novelty (prior art compliance); target was 94%, and USPTO exceeded it at 96%.

Statute 35 U.S.C. 103, Conditions for patentability, nonobvious subject matter (prior art compliance); target was 92%, and USPTO exceeded it at 93%

Statute 35 U.S.C. 112 (a)/(b) rejections related to 35 U.S.C 112(f); target was 94%, and USPTO exceeded it at 95%

Finally, USPTO modified its production incentive structures to better reward employees who make meaningful contributions to pendency and quality goals. Additionally, USPTO is working to reimagine the examiner hiring process, enhance examiner training, and increase overall employee connectedness and well-being. In FY 2024, 923 patent examiners joined USPTO, exceeding the goal of 850 new hires and culminating in a corps of 8,500-plus examiners. USPTO delivered approximately 363,604 hours of onboarding education during FY 2024 and is adjusting Patent Training Academy curriculum to further equip these new hires for success. USPTO is also using existing incentive programs to leverage an all-of-agency approach in support of its hiring and retention efforts, with a concentrated focus on examiner hiring over the next several years.

Reduce trademark pendency and protect the integrity of the register

For over a decade, USPTO maintained first action trademark pendency between 2.5 and 3.5 months. A surge in trademark filings during FY 2020 and FY 2021 resulted in an unprecedented unexamined inventory of trademark applications, increasing pendency to over 8 months. Following the surge, USPTO took several steps to flatten the growth of unexamined inventory, the first stage of pendency reduction. USPTO achieved this goal by the end of FY 2023 and, in December 2023, initiated a comprehensive plan to direct even more resources to reducing unexamined inventory and improving pendency. On October 1, 2023, unexamined inventory was 526,160, and as of September 30, 2024, it was 436,073, a decrease of 90,087 or 17.1%. As a result of declining unexamined inventory, both first action and total pendency decreased to 7.5 and 14.1 months, respectively, surpassing Trademarks' FY 2024 pendency targets of 8.4 and 14.4 months. USPTO expects pendency to further decline over the next two years. USPTO explored additional opportunities to streamline and automate trademark work processes. USPTO launched these initiatives in FY 2024 to reduce pendency:

- **Hired, trained, and retained examining attorneys.** USPTO graduated its third Trademark Academy class and welcomed 56 new and returning examining attorneys.
- **Introduced additional production incentives**. USPTO introduced FY 2024 first action incentive awards for examining attorneys, including individual monthly awards and a group award for attaining first action pendency goals for the fiscal year. This measure contributed to 11.6% more first actions in FY 2024 as compared to FY 2023.
- **Implemented process improvements.** USPTO implemented a new prima facie case examination standard for first office actions, transitioning the exceptional office action standard from the first office action to the final office action. This change, while still meeting the legal standard required, enables first actions to be issued more efficiently.
- **Improved Information Technology (IT).** USPTO focused additional IT resources for TM Exam (Trademark Examination) to reduce IT system downtime, latency, and system errors. In spring 2024, USPTO retired the legacy Trademark Reporting and Application Monitoring (TRAM) mainframe. TRAM was in use for more than 40 years, and replacing it was a significant technological effort. The project involved simultaneously redesigning components, extensive recoding, and refactoring legacy capability. Simultaneously, USPTO further modernized TM Exam and other systems in parallel.

USPTO exceeded all trademark quality targets in FY 2024. Compliance rates for first and final office actions were 96.2% and 98.8%, respectively, versus the 95.5% and 97.0% targets. The agency remains committed to maintaining high compliance quality metrics and is reviewing internal standards to ensure they align with examination efficiency goals. Efforts to maintain quality during FY 2024 included:

- **Launched a stable search environment.** USPTO launched a cloud-based Trademark Search system to modernize the search experience and meet the needs of the trademark community.
- **Replaced outdated systems**. USPTO replaced the Electronic Trademark Assignment System (ETAS) with the Assignment Center, a streamlined platform for customers to submit and track all trademark assignments. It offers step-by-step guidance and easy editing capabilities.
- **Improved examination guidance.** The Trademark Manual of Examining Procedure (TMEP) was updated in May 2024 to include relevant precedential decisions and final rules issued since the November 2023 revision.

The number of scams reported by trademark applicants and registrants increased during FY 2024. This rise in reports was likely due to the considerable strides USPTO made in spreading awareness about scams through outreach and education via webinars and social media, and the variety of channels the agency established, including the Trademark Assistance Center and USPTO customer experience (CX) survey, that provide an opportunity for customers to file complaints. USPTO provides a list of common scams and signs to watch for regarding IP fraud. Additionally, USPTO created a series of webpages navigable from the main scam webpage, Protect Against Trademark Scams, that warn customers about specific scams and what to do if they are scammed. USPTO built on a series of multiyear initiatives to protect the integrity of the Trademark Register, strengthen controls, and enhance operations. USPTO made advancements throughout FY 2024 to protect the integrity of the Trademark Register including:

- **Improved enforcement of USPTO.gov account agreement.** USPTO began requiring attorney-sponsored support staff to ID-verify their USPTO.gov accounts, enabling the shutdown of accounts used to file submissions that violated the account agreement. USPTO suspended 394 USPTO.gov accounts for user agreement violations and referred 16 practitioners to USPTO Office of Enrollment and Discipline for suspected attorney misconduct related to the U.S. counsel rule.
- **Enlisted paralegal and attorney support**. The Register Protection Office (RPO) hired four new paralegals to support the administrative review of suspicious filings. The RPO also hired four attorneys, which increased its capacity to review suspicious submissions, draft sanctions orders, and examine nonuse cancellation petitions for reexamination and expungement.
- **Suspended infringing domain names used for scams.** USPTO acted against two infringing domain names—usptogov.us and trademarkassistancecenter.com, which were being used to scam customers. Both domain names were suspended.
- **Improved address validation.** USPTO improved its automated address verification system to help examining attorneys more efficiently evaluate the validity of physical addresses. Using bogus addresses is one way that foreign filers attempt to circumvent the U.S. counsel rule.

Protect and enforce IP abroad
The scope of counterfeited and pirated products seeking entry into the American market is significant and growing. To combat this issue, USPTO created an anti-counterfeiting campaign and regularly works with U.S. Customs and Border Protection to protect IP rights. In May 2023, USPTO published a Federal Register Notice requesting insight from businesses, IP rights holders, and other stakeholders regarding the future of anti-counterfeiting and anti-

piracy trends and strategies. USPTO also conducted a public roundtable on this issue in October 2023, "Future strategies in anti-counterfeiting and anti-piracy," and released a new edition of its China IP Rights Toolkit to help innovators understand the differences between American and Chinese IP laws, as well as IP protection challenges in the People's Republic of China (PRC).

USPTO provided capacity-building and training workshops around the globe in FY 2024. These programs were focused on IP enforcement and targeted audiences such as the judiciary, police departments, prosecutors, and customs and border enforcement officials. USPTO conducted some programs in partnership with other federal agencies, state governments, foreign governments, and nongovernmental organizations. USPTO's Global Intellectual Property Academy (GIPA) engaged in capacity-building programs for foreign IP officials, including patent and trademark examiners. The GIPA delivered over 125 USPTO-organized programs during FY 2024. Altogether, USPTO trained over 7,800 American stakeholders and foreign officials responsible for the examination, protection, and enforcement of IP via its educational programs.

ITA led five STOPfakes Roadshows across the United States in locations such as Oregon, Florida, and Nevada as well as virtual sessions for rural businesses in Iowa and South Dakota. This ensured engagement from a wide variety of community organizations and American businesses on discussions and business consultations related to IP. ITA also led its first STOPfakes Roadshow at a minority serving institution, Jackson State University, with a focus on providing IP outreach and specialized business consultations to an underserved population in addition to the university community.

USPTO's network of IP attachés and IP specialists work from 13 posts located around the world to support U.S. IP interests and assist U.S. rights holders doing business in foreign markets. During FY 2024, USPTO's IP attachés assisted more than 5,980 American inventors and businesses, including many small and medium-sized enterprises and first-time or new-to-market exporters. The IP attachés also resumed in-person domestic outreach in FY 2024, conducting meetings with stakeholders and business groups in Florida and Georgia.

USPTO exceeded its FY 2024 target in achieving a percentage of prioritized countries (i.e., Brazil, PRC, and India) for which IP country teams have made progress on at least three of the four performance criteria. The percent of action steps for which progress was made was 88% for Brazil, 76% for PRC, and 81% for India. In FY 2024, USPTO signed agreements with the Dominican Republic, El Salvador, and Trinidad and Tobago that provide for accelerated patent grant procedures to benefit U.S. patent holders. USPTO also concluded 14 other agreements and memorandums of understanding with foreign IP offices and partner organizations, including Bahrain, PRC, Indonesia, Israel, Laos, Moldova, Namibia, Nepal, the Philippines, Taiwan, United Arab Emirates, United Kingdom, and Uruguay.

In the interest of U.S. national and economic security, the Biden Administration's U.S. Government National Standards Strategy for Critical and Emerging Technology prioritizes the enhancement of efficiencies in the licensing of standard essential patents (SEPs). USPTO launched several initiatives during FY 2024 in pursuit of this goal. In May 2024, USPTO partnered with the WIPO's Arbitration and Mediation Center to conduct a workshop on dispute resolution efforts related to SEPs and disputes concerning fair, reasonable, and non-discriminatory (FRAND) licensing. In June 2024, USPTO signed a memorandum of understanding with the United Kingdom Intellectual Property Office to examine ways of improving transparency in FRAND licensing of technical interoperability standards and engage in stakeholder outreach to raise awareness of SEP-related issues.

As one of the most powerful technologies of the modern era, AI presents big opportunities—and big risks. On October 30, 2023, President Biden issued Executive Order 14110: Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence, which directed USPTO to develop and distribute

guidance to patent examiners and applicants addressing: 1) inventorship and the use of AI in the inventive process, within 120 days; and 2) other considerations at the intersection of AI and IP, including patent subject matter eligibility (SME), within 270 days. USPTO achieved both goals by their targeted deadlines.

Bolstered by the executive order and extensive stakeholder engagement efforts, on February 13, 2024, USPTO issued several documents for inventors on guidance and to seek their feedback, including:

- AI and Emerging Technology Partnership provided technical collaboration with AI researchers and data scientists.
- Inventorship Guidance for AI-Assisted Inventions embraced the use of AI in innovation and provided clarity on determining proper inventorship for AI-assisted inventions.
- Guidance on Use of Artificial Intelligence-Based Tools in Practice before the United States Patent and Trademark Office addressed considerations around stakeholder use of AI systems in preparing patent applications and documents for submission to USPTO.
- Memorandum to the Patent Trial and Appeal Board and Trademark Trial and Appeal Board addressed misuse of AI by parties in board proceedings.
- Request for Comments Regarding the Impact of the Proliferation of Artificial Intelligence on Prior Art, the Knowledge of a Person Having Ordinary Skill in the Art, and Determinations of Patentability Made in View of the Foregoing sought public feedback on AI's effects in certain USPTO evaluations in patentability determinations.

2024 Guidance Update on Patent Subject Matter Eligibility, Including on Artificial Intelligence assisted USPTO personnel and stakeholders in evaluating the subject matter eligibility of claims in patent applications and patents involving inventions related to AI.

Performance Indicator Results

Class	Operating Unit	Performance Indicator	FY 2020 Actual	FY 2021 Actual	FY 2022 Actual	FY 2023 Actual	FY 2024 Actual	FY 2024 Target	FY 2024 Status
Current/ Recurring	USPTO	Patents total PTA Compliance, all mailed actions	83%	83%	80%	81%	79%	80%	Not Met
Current/ Recurring	USPTO	Patents PTA compliance, remaining inventory	88%	86%	85%	82%	80%	81%	Not Met
Current/ Recurring	USPTO	Patent Statutory Compliance Metrics (Percent)Statute 35 USC 101 (including utility and eligibility)	97.7%	98.3%	98.3%	98.2%	97.8%	94.0%	Exceeded

Class	Operating Unit	Performance Indicator	FY 2020 Actual	FY 2021 Actual	FY 2022 Actual	FY 2023 Actual	FY 2024 Actual	FY 2024 Target	FY 2024 Status
Current/ Recurring	USPTO	Patent Statutory Compliance Metrics (Percent) Statute 35 USC 102 (prior art compliance)	94.3%	95.1%	95.3%	96.0%	96.0%	94.0%	Exceeded
Current/ Recurring	USPTO	Patent Statutory Compliance Metrics (Percent) Statute 35 USC 103 (prior art compliance)	88.9%	90.7%	91.5%	92.2%	93.2%	92.0%	Exceeded
Current/ Recurring	USPTO	Patent Statutory Compliance Metrics (Percent) Statute 35 USC 112 (35 USC 112(a), (b) including (a)/(b) rejections related to 35 USC 112(f)	90.6%	92.2%	94.6%	94.4%	95.0%	94.0%	Exceeded
Current/ Recurring	USPTO	Trademark average first action pendency (months)	3.0	6.3	8.3	8.5	7.5	8.4	Exceeded
Current/ Recurring	USPTO	Average processing time for trademark applications	9.5	11.2	13.8	14.6	14.1	14.4	Exceeded
Current/ Recurring	USPTO	Percentage of prioritized countries for which intellectual property country teams have made progress on at least 3 of the 4 performance criteria	100%	100%	100%	100%	100%	66%	Exceeded

Strategic Conclusions

Improve equitable and affordable access to the IP system
USPTO strengthened the resources and services it provides to stakeholders through outreach and engagement activities designed to foster an inclusive innovation ecosystem, including the establishment of a new business unit, the OPE. The OPE consolidates outreach, education, CX, and customer engagement functions from across USPTO to deliver a greater impact to more innovators and reach new audiences. Also, USPTO is expanding outreach efforts by announcing the establishment of a Southeast Regional Outreach Office in Atlanta, Georgia, and the first Community Outreach Office in Strafford County, New Hampshire.

USPTO released a comprehensive national blueprint—the National Strategy for Inclusive Innovation—to expand inclusivity and help ensure America's prosperity through a strong innovation economy. The strategy presents a set of guiding principles and recommendations to grow the economy, create quality jobs, and address global challenges through a dynamic and thriving innovation ecosystem.

Additionally, USPTO increased the number of PTRCs, which are typically located in college and university libraries, thereby providing free education and assistance to more inventors, entrepreneurs, and students. USPTO provides comprehensive patent and trademark training to PTRC librarians on an ongoing basis to better serve customers interested in IP. USPTO currently has over 90 PTRCs, including libraries at five HBCUs. These resources will expand USPTO's presence and serve as extensions of its outreach operations by providing important services directly to local inventors and entrepreneurs, including those located in underserved areas or communities, and by collaborating with community organizations and local professional groups to enhance the reach of IP awareness and education programs.

Finally, USPTO increased access to, awareness of, and participation in the IP system through mentoring programs with Small Business Development Centers, colleges and universities, and other regional partners. USPTO conducted hundreds of trainings and stakeholder meetings to increase equitable access to the IP system across the country, including among low-income communities, small businesses, minorities, women, rural markets, and veterans and their spouses. USPTO also conducted numerous public education events on IP and innovation, offering affordable resources and advancing initiatives to expand access to the IP system.

Enhance patent quality and compact prosecution
USPTO will focus on investments in patent examination quality, including application readiness, continuation practice, prior art and searching, training, and prosecution changes and enhancements to improve patent durability. USPTO recognizes that workflow optimization will play a key role in improving patent application pendency and compliance with PTA statutory time frames. To that end, USPTO is bringing more tools to examiners, including the use of AI to complement existing processes and programs. Other FY 2024 patent initiatives included external customer surveys that gathered respondent opinions on patent examiners' adherence to rules and procedures; the correctness, clarity, and consistency of rejections; and overall examination quality. USPTO invited over 6,500 randomly selected customers to participate, and the resulting Quality NPS of 53 exceeded the FY 2024 target of 50.

Reduce trademark pendency and protect the integrity of the register
Registered trademarks play a critical role in promoting innovation across almost all sectors of the American economy. USPTO received 767,138 trademark application classes for registration in FY 2024, 30,120 more classes than in FY 2023. The growth rate of new trademark applications is stable, and FY 2024 trademark filings were in line with pre-pandemic trends. In FY 2024, USPTO successfully:
- Exceeded all pendency and quality targets.
- Retired the legacy TRAM IT system, while modernizing all Trademark Product Line systems in parallel.
- Graduated the third Trademark Academy class, welcomed new and returning examining attorneys, and hired a workforce planner to help forecast future staffing needs.
- Empowered RPO to hire more attorneys and paralegals to combat scams targeting trademark applicants and registrants. This increased capacity to review suspicious submissions, draft sanctions orders, and examine nonuse cancellation petitions for reexamination and expungement.

- Released the beta version of Trademark Center, a new system for customers to apply for trademark registration.
- Maintained a workforce that works remotely in 45 states and U.S. territories.

Protect and enforce IP abroad

To help protect and enforce IP abroad, USPTO has IP attachés and IP specialists stationed worldwide supporting U.S. IP interests and assisting U.S. rights holders in doing business around the globe. In FY 2024, USPTO's IP attachés assisted nearly 6,000 American inventors and businesses, including many small and medium-sized enterprises and first-time or new-to-market exporters. USPTO will also actively engage with other patent and trademark offices around the world. The agency will promote cooperation and collaboration with those IP offices by exchanging information on practices and programs that facilitate increasingly user-friendly and interoperable patent, trademark, and design systems. USPTO will also provide capacity-building and training workshops around the globe, to include foreign IP officials. These capacity-building programs cover IP protection and enforcement, and target audiences are comprised of patent examiners, police, and prosecutors. USPTO conducts some of these programs in partnership with other federal agencies, foreign governments, and non-governmental organizations.

STRATEGIC OBJECTIVE 1.6 – Improve the Nation's cybersecurity and protect Federal Government networks

Lead Operating Unit: NIST
Contributing Operating Units: BIS, ITA, NTIA

Key Strategies:
- Develop and disseminate robust technical standards and cybersecurity best practices
- Improve the security and integrity of the technology supply chain
- Deliver cybersecurity-enhancing research and technology solutions to industry and government stakeholders
- Expand cybersecurity training and workforce development and increase access to underrepresented communities

Executive Summary of Progress

The Department of Commerce, through multiple operating units, made progress in improving the Nation's cybersecurity and protecting Federal Government networks. Major efforts and accomplishments in FY 2024 that contributed to progress on Strategic Objective 1.6 are highlighted below.

National Institute of Standards and Technology (NIST)

Post-Quantum Cryptography (PQC)
The National Institute of Standards and Technology (NIST) released its first set of encryption tools that are designed to withstand cyberattacks from a quantum computer, ensuring that our sensitive data, from financial transactions to national security secrets, remain protected in the face of unprecedented technological advancements. The standards, which contain the encryption algorithms' computer code, instructions for how to implement them, and their intended uses, are the result of an eight-year effort led by NIST, which has a long history of developing encryption.

Cybersecurity
NIST updated the widely used Cybersecurity Framework (CSF). The new 2.0 edition, released on February 26, 2024, is designed for all audiences, industry sectors and organization types, from the smallest schools and nonprofits to the largest agencies and corporations — regardless of their degree of cybersecurity sophistication. As a result of the CSF's impact to help organizations of all sizes manage cybersecurity risk, NIST was awarded the "Ecosystem Champion Award" at the inaugural edition of the Cyber Policy Awards in Washington, DC.

NIST updated two guidelines, *Protecting Controlled Unclassified Information in Nonfederal Systems and Organizations* (NIST SP 800-171 Rev. 3) and its companion, *Assessing Security Requirements for Controlled Unclassified Information* (NIST SP 800-171A Rev. 3) that contractors and other organizations

that do business with the federal government must follow to protect sensitive information they handle. To assist implementers already using the previous version of this guidance, NIST issued an analysis of changes that details how each requirement has evolved.

NIST published *Cybersecurity of Genomic Data* (NIST IR 8432) summarizing the current practices, challenges, and proposed solutions for securing genomic data, as identified by genomic data stakeholders from industry, government, and academia. This effort is informed by direction from Congress, the White House, and NIST's existing expertise in genomics as well as cybersecurity and privacy.

NIST published two guides, *Data Confidentiality: Identifying and Protecting Assets Against Data Breaches (Vol A-C)* (NIST SP 1800-28*) and *Data Confidentiality: Detect, Respond to, and Recover from Data Breaches (Vol A-C)* (NIST SP 1800-29) that provide recommendations on how to prevent and recover from data breaches. The guidance includes cybersecurity and privacy considerations to prepare for data breaches and specific technical direction for implementation.

NIST published a report entitled *Recommended Security Requirements for Consumer-Grade Router Products* (NIST IR 8425A). Router cybersecurity is of paramount importance in today's interconnected world because routers serve as the gatekeepers of our networks, managing the flow of data between devices in the home or office and the internet. This publication presents the consumer-grade router profile, which includes cybersecurity outcomes for consumer-grade router products and associated requirements from router standards. This draft report is part of NIST's efforts to support the development of a cybersecurity profile for consumer-grade routers as related to the White House's U.S. Cyber Trust Mark program announced in July 2023.

NIST published *Building a Cybersecurity and Privacy Learning Program* (NIST SP 800-50r1), which provides updated guidance for developing and managing a robust cybersecurity and privacy learning program in the federal government.

NIST released a second public draft of Digital Identity Guidelines (NIST SP 800-63 Revision 4), and three of its companion publications (SP 800-63A, SP 800-63B, and SP 800-63C), which have been updated to reflect the robust feedback that NIST received in 2023 as part of a four-month-long comment period and yearlong period of external engagement. These drafts offer updated guidance on a wide range of methods people use to prove their identity, from digital wallets and passkeys to physical IDs.

NIST also released a new study, *Face Analysis Technology Evaluation: Age Estimation and Verification* (NIST IR 8525) that evaluates the performance of software that estimates a person's age based on the physical characteristics evident in a photo of their face.

Workforce Development and External Engagements
NIST released updates to NICE Framework Components -- Work Role Categories, Work Roles, Competency Areas, and Task, Knowledge, and Skill (TKS) statements as well as the relationships between those elements. Additionally, NIST released new FAQs, a detailed revision process, and an account of the framework's history and change logs were also released.
NIST awarded cooperative agreements totaling nearly $3 million aimed at developing the workforce needed to defend the nation's organizations and infrastructure from cybersecurity risks. The grants of roughly $200,000 each will go to 15 education and community organizations in 11 states that are working to address the nation's shortage of skilled cybersecurity workers. More information about the recipients can be found here.

Bureau of Industry and Security (BIS)

On September 11, 2024, BIS published the proposed rule "Establishment of Reporting Requirements for the Development of Advanced Artificial Intelligence Models and Computing Clusters." This proposed rule, if adopted in final form, would amend BIS's Industrial Base Surveys—Data Collections Regulations by establishing reporting requirements for the development of advanced artificial intelligence (AI) models and computing clusters under *Executive Order 14110: Safe, Secure and Trustworthy Development of AI*. Such dual-use AI foundation models will likely drive significant advances in numerous industries on which the national defense depends. These advances require BIS to conduct an ongoing assessment of the AI industry to ensure that the U.S. Government has the most accurate, up-to-date information when making policy decisions about the international competitiveness of the industrial base and its ability to support the national defense.

International Trade Administration (ITA)

ITA's Chief Information Officer (CIO) served as a keynote speaker for ITA at several government and industry-sponsored summits and symposiums to increase public awareness on cybersecurity and strengthen ties with likeminded institutions on best practices and standards. The CIO similarly completed interviews with IT magazines to disseminate ITA's initiatives on cybersecurity. ITA also hosted events, such as a webinar on Cyber Opportunities in the Middle East and Global Cybersecurity Week at the Rivest, Shamir, and Adleman Conference in San Francisco, California, where American cybersecurity companies participated in the Global Chat program meeting ITA experts from 12 countries. In June 2024, ITA supported American cybersecurity companies at Infosecurity Europe held in London and hosted Euro Chat meetings, on-site counseling, and recruited international delegates.

ITA achieved milestones defined by the Department in support of *Executive Order 14028: Improving the Nation's Cybersecurity*. This included meeting the federal compliance requirements for security information and event management, user behavior analytics, security orchestration, automation, response capabilities, and detection and monitoring of data stream disruptions. ITA nearly completed compliance, with minor exceptions for legacy systems, for Data-at-Rest, Data-in-Transit and Multi-Factor Authentication on all authorized systems. ITA achieved complete compliance in cyber awareness for all employees on-time and within budget. To support a cybersecurity-minded workforce that safeguards and promotes U.S. national security and economic prosperity in its mission, ITA also implemented information sessions focused on cybersecurity topics for all information technology federal and contractor staff. The sessions covered potential threats, methods to safeguard critical information, and shared insights into vulnerabilities within respective work portfolios. These capacity-building sessions allow staff to gain a broader understanding of ITA security needs and how employee actions impact ITA's cybersecurity posture in both mission and mission support work.

Performance Indicator Results

Class	Operating Unit	Performance Indicator	FY 2020 Actual	FY 2021 Actual	FY 2022 Actual	FY 2023 Actual	FY 2024 Actual	FY 2024 Target	FY 2024 Status
Current/ Recurring	NIST	Number of companies and organizations exposed to National Cybersecurity Center of Excellence (NCCoE) produced cybersecurity guides and other products	12,100	13,121	14,343	16,130	26,714	17,500	Exceeded
Current/ Recurring	NIST	Cumulative number of collaborators on NCCoE projects	294	396	513	625	758	750	Exceeded
Current/ Recurring	NIST	Number of resources derived from the cybersecurity framework	159	179	189	204	227	220	Exceeded

Strategic Conclusions

The Department made great strides in cybersecurity during FY 2024. NIST leads the execution of the U.S. Government National Standards Strategy for Critical and Emerging Technology, including for cybersecurity standards. Additionally, NIST, through FY 2024, provided resources to meet American needs in cybersecurity through the release of the Cybersecurity Framework 2.0, an updated NICE Workforce Framework, and many technical resources described above.

Cybersecurity risks are expanding constantly with increasing technological advances, and managing those risks must be a continuous process. Greater effort must be spent protecting systems, developing new technologies, and predicting and being prepared for future challenges and threats. These efforts can be strengthened through the Department's prioritization and support of fundamental and applied cybersecurity research, leadership in developing cybersecurity standards and guidelines, and transitioning these resources into practice. Additionally, increased communications surrounding the release of new cybersecurity standards, resources, and guidelines, can benefit industry, the public sector, and the public.

STRATEGIC OBJECTIVE 1.7 – Advance U.S. leadership in the global commercial space industry

Lead Operating Unit: NOAA
Contributing Operating Units: BEA, BIS, EDA, ITA, MBDA, NIST, NTIA, USPTO

Key Strategies:
- Coordinate regulatory functions across domestic and international stakeholders to promote competitiveness, and increase legal certainty for U.S. commercial space businesses
- Grow the customer base for U.S. commercial space goods and services
- Improve space safety and sustainability
- Promote commercial space innovation
- Advance development, use, and application of space-based Earth observation capabilities to empower better decision making by the public and private sector

Executive Summary of Progress

The Department promoted U.S. commercial space leadership by advancing new regulatory approaches, fostering international space business partnerships to grow markets, fielding a new space traffic safety system, and awarding commercial contracts that supported space sustainability, innovation, and weather/space weather forecasting.

- The National Oceanic and Atmospheric Administration (NOAA) launched the initial phase of the Traffic Coordination System for Space (TraCSS), which began delivering spaceflight safety services to a beta user group of satellite owners/operators representing approximately 1,000 satellites in orbit. The launch of TraCSS Phase 1.0 represented the culmination of many efforts throughout FY 2024, including hiring actions, milestone approvals, contract awards, and pathfinder projects. NOAA awarded over $40 million in commercial orders and contracts for pathfinder studies and systems integration work in support of its development of TraCSS.
- In April 2024,the Bureau of Industry and Security (BIS) released a rule streamlining secure trade with Australia and the United Kingdom in light of the Australia, United Kingdom, and the United States (AUKUS) Trilateral Enhanced Security Partnership. As part of these regulatory revisions, BIS removed license requirements for most commercial satellite and spacecraft parts and components, reducing licensing burdens on industry and promoting joint development of space-related technologies across the U.S., Australian, and British industrial bases. BIS also completed an interagency review effort to modernize space-related export controls to ensure a globally competitive U.S. industrial base while protecting national security and foreign policy interests.
- NOAA supported the rollout and initial implementation of the Administration's U.S. Novel Space Activities Authorization and Supervision Framework and companion legislation, which aim to provide U.S. industry with regulatory clarity and certainty regarding future commercial activities in space.

- NOAA co-organized space dialogues with Africa, Singapore, South Korea, Italy, India, Canada, the Quad (Australia, India, Japan, U.S.), France, New Zealand, Germany, and Japan to promote business partnerships that strengthen diplomatic ties and expand the customer base for American space companies.
- NOAA implemented streamlined licensing of commercial remote sensing space systems on timelines that support the needs of American businesses. NOAA also collected industry feedback (via Request for Information and listening session) on ways to improve NOAA space regulations further.
- NOAA established an Advisory Committee on Excellence in Space (ACES) and appointed 17 experts to develop policy and regulatory recommendations in support of American commercial space leadership.
- The Bureau of Economic Analysis (BEA) published revised and new statistics quantifying the U.S. space economy for 2017–2022. BEA also hosted a space economy measurement workshop that brought together experts from across various U.S. Government, private industry, academic, and international organizations. Feedback will be used to expand and improve BEA's space economy statistics.
- The International Trade Administration (ITA) played an important role in promoting U.S. aerospace trade interests as the industry faced increased competition from abroad. At the close of FY 2024, ITA's Advocacy Center had 40 active space-related cases with a total project value of $10.5 billion, with $9.8 billion in U.S. export content and supported approximately 41,836 jobs. ITA received 21 new advocacy requests related to the space industry sector. ITA recorded four contract award wins with a total value of $95.3 million with 100 percent U.S. export content and supported 407 jobs.
- ITA organized a panel at the SelectUSA Investment Summit to encourage foreign investment in the American commercial space industry. Speakers discussed best practices and benefits for foreign commercial space companies wishing to invest in the United States. Nearly 150 investors from over 20 countries attended the panel. The summit is the largest annual event focused on attracting investment into the United States.
- The National Telecommunications and Information Administration (NTIA) advanced the global standing of the American satellite and space industries by securing favorable outcomes on spectrum access, orbital access, and space sustainability as a core member of the American delegation to the International Telecommunication Union's (ITU) 2023 World Radiocommunication Conference and Radio Assembly in early FY 2024.
- NTIA paved the way for growth in the commercial space sector by successfully coordinating more than 1000 Federal Communication Commission (FCC) applications for satellites, earth stations, launches, and other space uses, thereby allowing both federal and commercial missions to thrive.
- NTIA facilitated the deployment of space-based connectivity globally and from low-Earth-orbit (LEO) satellite systems by engaging with bilateral and multilateral partners jointly with the State Department and the FCC.
- NTIA advocated for space-based global connectivity, particularly to unserved and underserved communities, through the G7 Industry and Technology Working Group, the G20 Digital Economy Working Group, the UN General Assembly's Pact for the Future, the International Telecommunication Union's Radiocommunication, Development, and Standardization Sectors, and the Inter-American Telecommunications Commission (CITEL).

- NTIA encouraged support for global connectivity, including via LEOs in several bilateral trade missions. During a visit to Kenya in April 2024, the Department announced AST SpaceMobile's African testing plans.
- NTIA improved the global regulatory environment for U.S.-based satellite companies by strengthening international capacity to license satellite networks through specialized trainings on satellite spectrum management conducted via the United States Telecommunications Training Institute and the Carnegie Mellon Executive Training Program, among other fora.
- NTIA worked to facilitate and promote the deployment of novel satellite "direct-to-handset" technologies by proposing a methodology for coordinating spectrum use with radio astronomy and seeking comments on the role of satellite networks in 6G as part of a broader request for Comment on 6G technology.
- NTIA, in partnership with National Aeronautics and Space Administration (NASA) and the U.S. Department of Defense (DOD), commenced a study under the National Spectrum Strategy to expand the use of the 18 GHz band for satellite and space-to-space communications.
- The National Institute of Standards and Technology sponsored a workshop on standards and policy for In-Space Servicing, Assembly, and Manufacturing, helping to enable innovation in this burgeoning commercial space sector.
- The U.S. Patent and Trade Office (USPTO) hosted a Dialogue on Intellectual Property (IP) and Space Commercialization that focused on the intersection of IP and the expanding commercial space sector.
- The Deputy Secretary hosted a Women's History Month event celebrating Women in Space Commerce, participated in a Black Space Week event highlighting African American contributions to space, and hosted a joint summit of the Patti Grace Smith and Brooke Owens Fellowship programs that advance DEI in the space industry.
- The Minority Business Development Agency (MBDA) signed a memorandum of understanding with NASA to help connect minority business enterprises (MBEs) to NASA acquisition and development opportunities. Through this effort, NASA and MBDA aim to boost equitable participation of MBEs in aerospace technology and scientific discovery by identifying and addressing barriers and policy gaps. MBDA and NASA share an interest in fostering collaboration, capacity building, business development, and increasing knowledge, awareness, and engagement between and among MBDA Business Centers and Projects in space commerce.
- NOAA cosponsored the Diverse Dozen event programming at the American Institute of Aeronautics and Astronautics (AIAA) ASCEND space conference. The programming highlighted underrepresented voices to promote Diversity, Equity, and Inclusion (DEI) in the space community.

Performance Indicator Results

Class	Operating Unit	Performance Indicator	FY 2020 Actual	FY 2021 Actual	FY 2022 Actual	FY 2023 Actual	FY 2024 Actual	FY 2024 Target	FY 2024 Status
Current/ Recurring	NOAA	Number of space policy related decision processes, rulemakings, statements, or other governmental activities influenced/led by the Department of Commerce	16	18	20	20	24	24	Met
Closing Out	NOAA	Number of actions taken in response to stakeholder requests for advocacy support	40	60	70	80	80	80	Met
Closing Out	NOAA	Percent of milestones achieved towards establishment of space situational awareness (SSA) services for civil and commercial stakeholders	25%	30%	40%	35%	75%	75%	Met
Current/ Recurring	NOAA	Number of workshops, reports, and other tools produced to facilitate growth and advancement of the U.S. commercial space industry	3	5	6	9	12	9	Exceeded

Strategic Conclusions

The Department achieved substantial progress and met its performance targets with strong support from the Deputy Secretary to advance commercial space leadership. The Department's work to field an operational space situational awareness capability for space safety and sustainability made enormous progress with support from industry, DoD, the White House, and Congress. The Department promoted the U.S. as the country of choice for commercial space activities in the face of competitive financial incentives and regulatory environments overseas. The Department issued streamlined export control regulations and engaged other nations in an unprecedented amount of space business dialogues and space-related trade advocacy to grow U.S. space exports.

STRATEGIC OBJECTIVE 2.1 – Drive equitable, resilient, place-based economic development and job growth

Lead Operating Unit: EDA
Contributing Operating Units: BEA, Census, ITA, MBDA, NIST, NOAA, NTIA

Key Strategies:
- Support communities in developing and growing their local economies through customer-centric place-based investments
- Invest in programs and projects that help communities become more resilient to economic shocks and advance equitable economic opportunity
- Support and accelerate high-growth industry clusters that are critical for economic and national security
- Accelerate the recovery of communities that rely on the travel, tourism, and outdoor recreation sectors
- Grow the Blue Economy

Executive Summary of Progress

The Department is committed to promoting equitable and resilient economic development across the United States and supporting communities and regions to build the capacity to create sustainable economic opportunities and good-paying jobs. Through a concerted effort across several operating units, the Department made progress in advancing this objective through grant funding, targeted initiatives, access to data, resources, and other efforts to support resiliency and place-based economic development and growth, especially for underserved communities and regions.

Economic Development Administration (EDA)
In FY 2024, EDA advanced economic opportunities and growth through funding and equity-focused initiatives.

In phase 2 of the Tech Hubs program, EDA awarded $504 million in implementation grants to scale up the production of essential technologies, generate employment opportunities in innovative sectors, and foster the growth of future industries across the United States. Key requirements for these applications were equity and diversity; as such, applicants were required to present detailed plans for engaging underserved and underrepresented communities through new career paths, apprenticeships, business opportunities, and more. As a result, ten Tech Hubs will serve small and rural communities, nine hubs will serve underserved communities, four hubs include tribal governments in their consortia, and three hubs received strategy development grants to help these consortia refine their approaches and ensure long-term success.

EDA also prioritized building long-term economic growth in local communities and regions through various equity-focused initiatives. In August 2024, EDA announced $184 million in phase 2 implementation grants for six awardees representing urban, rural, and Tribal communities spanning 20 states and territories under the Distressed Area Recompete Pilot Program. These grants aim to create good-paying jobs and stimulate economic growth in

some of the nation's most economically distressed areas. For instance, EDA made a $30 million award to support the Oasis Expansion Recompete Plan, led by the Platform for Social Impact, to connect residents with good jobs and revitalize the Villa Prades community in San Juan, Puerto Rico. The area faces challenges such as insufficient wages, lack of job opportunities, and dependency on informal employment. This EDA grant helps address these challenges through projects such as child and elder care programming, coordinated wraparound services, small business support, and social safety net reforms to create jobs and improve family economic mobility.

Additionally, EDA promoted equity and resilience through its base funding. EDA invested over $168.0 million in 175 economic development planning or implementation projects directly benefiting one or more traditionally underserved populations and geographies. For example, EDA awarded $2.5 million in Public Works funds to the Bay Mills Indian Community to upgrade its wastewater treatment capacity in Brimley, Michigan. The project will allow the Tribe to better market its developable land, and having adequate water will help grow the regional economic base in the area, thereby increasing resilience, creating jobs, leveraging private investment, and strengthening the regional economy.

Lastly, EDA's research partner, Argonne National Labs, launched a major upgrade to the National Economic Resilience Data Explorer (NERDE) tool with completely redesigned front and back ends, allowing for new data visualizations, customized geographies, and integration with the Economic Development Capacity Index tool used to track capacity changes. The redesign also includes a single point of entry for NERDE and newly developed resources to help stakeholders assess their capacity and the viability of place-based initiatives while reducing the barrier to entry.

EDA remains committed to promoting resilient place-based economic development and job growth. By investing in locally led economic development projects and prioritizing equity, EDA will create further sustainable employment opportunities and strengthen the economic resilience of regions across the United States, especially in underserved communities and regions.

National Oceanic and Atmospheric Administration (NOAA)
In FY 2024, NOAA contributed to the blue economy and community resilience.

NOAA's Status of the U.S. Fisheries report for 2023 showed that 94 percent of the stocks managed with known status are not subject to overfishing and nearly 82 percent are not overfished. Three fewer stocks are subject to overfishing and one fewer stock is overfished. Over 94 percent did not exceed their annual catch limits. One additional stock was rebuilt for a total of 50 since 2000. Ending overfishing and rebuilding stocks supported $321B of commercial and recreational sales and 2.3M jobs in 2022. This shows that the U.S. fishery management system is achieving its long-term sustainability goals.

NOAA opened commercial and recreational fishing areas that had been closed for over 20 years. Following the successful rebuilding of several species of overfished rockfish, reopening these areas has provided fishermen with greater access to healthy groundfish stocks. As of January 1, 2024, part of the Non-Trawl Rockfish Conservation Area off California and Oregon was reopened, granting access to approximately 2,400 square miles of historically important fishing grounds that have been closed since 2002. NOAA also removed Cowcod Conservation Area restrictions for non-trawl groundfish fisheries areas off southern California, opening roughly 4,600 square miles of historical fishing grounds to non-trawl groundfish commercial and recreational fisheries, previously closed since 2001.

NOAA opened 420 miles of salmon habitat in the Klamath River watershed in California and Oregon. For the first time since 1918, the Klamath River watershed is fully connected. This results from the world's largest dam removal effort, the Klamath River Renewal Project. The amount of habitat opened on the Klamath is equivalent to the distance between Portland, Maine, and Philadelphia, Pennsylvania.

As a result of international efforts led by the U.S. and NOAA, Pacific bluefin tuna has exceeded international targets a decade ahead of schedule and rebounded to new highs. This demonstrates the success of coordinated scientific efforts taken by the member countries through the International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean. The rapid rebuilding of the Pacific bluefin stock suggests the possibility of increased harvests in future years as the population continues to grow.

NOAA, in partnership with the Bureau of Indian Affairs, directed $300 million in Inflation Reduction Act (IRA) funding to support tribal priorities for fish hatcheries that produce Pacific Salmon and Steelhead in alignment with the U.S. Government's commitment to prioritize tribal initiatives and strengthen projects aimed at enhancing climate resilience for tribal fisheries and salmon recovery efforts. Additionally, IRA funds are supporting regional fishery management councils in implementing timely dynamic fishery management measures to increase fishing community resilience to fishery changes caused by climate impacts.

NOAA released new versions for a selection of navigation and positioning tools, including:
- The nowCOAST™ web mapping portal for real-time coastal observations.
- The Online Positioning Users Service (OPUS), which provides free access to high-accuracy National Spatial Reference System (NSRS) coordinates to support efforts that require high-precision positioning.
- A tool (VDatum 4.7) to enable users to translate geospatial data between 36 different vertical reference systems.
- An updated Surge and Tide Operational Forecast System that now covers the entire Atlantic Coast, the Gulf of Mexico, and the Caribbean Sea.

NOAA National Ocean Service also partnered with the Marine Technology Society (MTS) and United Nations Global Ocean Observing System to publish the Ocean Enterprise Dialogues with Industry Roadmap, which identifies key areas of public-private collaboration to support ocean observing organizations and the wider Blue Economy.

Lastly, in partnership with NOAA, BEA updated the Marine Economy Satellite Account (MESA) to include statistics on the economic contributions of the marine economy through the year 2022. The MESA shows that the marine economy accounted for $476 billion, or 1.8 percent of the U.S. Gross Domestic Product (GDP). The marine economy accounted for $777 billion or 1.7 percent in gross output and supported 2.4 million jobs. In addition, BEA also produced and updated the Outdoor Recreation Satellite Account, and Travel and Tourism Satellite Account statistics through 2022.

Bureau of Economic Analysis (BEA)
BEA made contributions to advance equitable and resilient economic development through comprehensive data analysis and innovative measures:

- In collaboration with the Bureau of Labor Statistics, BEA produced the first-ever joint distribution of U.S. personal income, personal consumption, and personal savings. These statistics are a major advance in measuring and understanding the distribution of well-being across households. Additionally, BEA produced updated statistics on the distribution of household income, as well as prototype statistics on the distribution of household income by state.
- BEA produced experimental measures of research and development activity, including value added, employment, and compensation for the United States and the 50 states plus D.C. covering the years 2017-2021.
- BEA produced updated statistics on U.S. territories' GDP through 2022 for Guam, U.S. Virgin Islands, and Puerto Rico, as well as GDP statistics for the Commonwealth of the Northern Mariana Islands for 2021 and 2022 (projected).

National Institute of Standards and Technology (NIST)

NIST supported community resilience and fostered economic opportunities through workforce development and advancing cybersecurity education:

- NIST released a new update to the NICE Framework components. Version 1.0.0 comprises Work Role Categories, Work Roles, Competency Areas, and Task, Knowledge, and Skill (TKS) statements, as well as the relationships between those elements. The NICE Framework lowers the barrier to performing cybersecurity work by describing methods to develop knowledge and skills. It illustrates the skills and tasks that are necessary for organizations to perform related work.
- NIST awarded cooperative agreements totaling nearly $3.6 million to build the workforce needed to safeguard enterprises from cybersecurity risks. The grants of roughly $200,000 each will go to 18 education and community organizations in 15 states that are working to address the nation's shortage of skilled cybersecurity employees. The organizations receiving the awards will build Regional Alliances and Multistakeholder Partnerships to Stimulate (RAMPS) cybersecurity education and workforce development. These RAMPS projects will align the workforce needs of local businesses and nonprofit organizations with the goals of the NICE Workforce Framework for Cybersecurity.
- The U.S. National Science Foundation (NSF) and the Department of Commerce announced a $30 million funding opportunity to establish the Network Coordination Hub that will manage the National Network for Microelectronics Education (NNME) and lead its national strategy to train skilled workers for good-paying jobs needed in the American semiconductor and microelectronics industry over the next decade. The Hub will be managed by NSF in close coordination with the Department.
- The White House announced the launch of the National Semiconductor Technology Center's (NSTC) Workforce Center of Excellence (WCoE). The WCoE will bring together stakeholders from across the private sector, government, nonprofits, training providers, community and technical colleges, universities, and labor organizations to develop innovative solutions to the industry's workforce challenges, accelerate best practices, promote good jobs, and strengthen recruitment and training of the next generation of semiconductor researchers, engineers, and technicians.

International Trade Administration (ITA)

Internation Trade Administration's National Travel and Tourism Office (NTTO) led efforts through the interagency Tourism Policy Council to implement the second year of the National Travel and Tourism Strategy (Strategy). The growth of international visitation serves as a positive indicator of performance in the implementation of the Strategy. According to NTTO's forecast for international visitation released in February 2024, the United States is on track to meet the Strategy's goal of 90 million visitors annually by 2026, which is one year ahead of the timeline identified in the Strategy. In FY 2024, NTTO drove equitable, resilient, and place-based economic development and growth to accelerate the recovery of communities that rely on the

travel, tourism, and outdoor recreation sectors. This included expanded collaboration with public and private stakeholders to increase opportunities for communities to participate in the travel and tourism economy. ITA leveraged a strategic partnership with the American Indian Alaska Native Tourism Association to increase travel and tourism to Native American, Native Hawaiian, and Alaska Native communities under the Native American Tourism & Improving Visitor Experience Act. This effort was carried out in close coordination with other operating units of the Department, as well as the Department of the Interior and the Department of Agriculture. NTTO also engaged in activities with other historically underrepresented communities to further advance the sustainability and inclusiveness goals of the Strategy.

ITA strengthened economic engagement in key international markets to drive place-based growth in communities across the United States and support the goals of the Strategy. For example, NTTO executed the 2024 U.S.-Japan Tourism Year to promote greater travel and tourism between the two countries, which included a Tourism Year Symposium in May 2024, attended by over 40 leaders from the U.S. and Japanese governments and industry. Also in May 2024, ITA officials led the U.S. delegation to the 14th U.S.-China Tourism Leadership Summit in Xi'an, China. Organized by China's Ministry of Culture and Tourism in collaboration with ITA, the event brought together U.S. and Chinese travel and tourism sector leaders to support two-way travel and people-to-people connections, encouraging economic growth and increased jobs across the United States. Furthermore, NTTO represented the United States in Tourism Ministerial and Tourism Working Group meetings of the Group of 20, the Asia-Pacific Economic Cooperation (APEC), and the Organisation for Economic Cooperation and Development to advance U.S. travel and tourism policy priorities. NTTO carried out responsibilities required of the Department for work associated with the Corporation for Travel Promotion (Brand USA), which is the nation's destination marketing organization and plays a key role in partnership with the U.S. Government to drive more international visitation and spending in the United States, supporting place-based economic development and job growth. NTTO managed the approval of Brand USA's FY 2024 Annual Objectives, facilitated the process for the Secretary of Commerce to appoint appropriate sector representatives to the Brand USA board of directors for the 2024 to 2027 term, processed Brand USA's requests for $100 million in matching funds, and conveyed its Annual Report to Congress. NTTO also regularly provided official U.S. travel and tourism statistics on international visitation and spending, such as data from the quarterly Survey of International Air Travelers and other key information via innovative data visualization tools. Stakeholders across the country rely on these data to inform their decisions on new market opportunities to grow international visitation and spending at the local level. In June 2024, ITA published the Travel & Tourism Top Export Market Ranking report to highlight new market opportunities for U.S. travel and tourism exports.

Minority Business Development Agency (MBDA)

MBDA's role in enhancing minority business enterprise (MBE) success is directly tied to its impact on national job creation, economic equity, and community development. In FY 2024, MBDA funded a national network of Business Centers and other technical assistance programs, including the Federal Procurement Center, the Minority Business Enterprise Equity Multiplier, Enterprising Women of Color, Tribal Program, Minority Colleges and Universities Program, and the Capital Readiness Program (CRP).

These MBDA programs spanned across the U.S. and supported MBEs and socially and economically disadvantaged individuals (SEDIs) through technical assistance. MBDA's CRP supported SEDIs starting and scaling their businesses through technical assistance, including assistance with access to various forms of capital, while MBDA's Business Centers and other programs supported MBEs to realize economic benefits in revenue (i.e., contracts,

procurements, and revenues), as well as capital (i.e., loans, financing, bonding, venture capital, etc.). Together, they served thousands of MBEs and SEDIs, resulting in job creation and retention from MBDA MBE clients.

Additionally, MBDA entered into more than two dozen strategic memoranda of understanding aimed at stem economic impact and job creation with Federal agencies, including the U.S. Department of Transportation, U.S. Department of Energy, International Trade Administration (ITA), Port of Seattle and the private sector including national chambers of commerce and trade associations.

Here's how MBDA's program investments have translated into jobs:

- **Increased Access to Capital.** MBDA helped MBEs secure loans, grants, and equity investments. These funds enabled MBEs to expand operations, hire additional staff, and develop new projects, directly creating jobs. For example, an MBE accessing MBDA-facilitated capital might expand production facilities, requiring new hires in operations, logistics, and management.
- **Facilitated Government and Private Sector Contracts**. MBDA programs connected MBEs with federal, state, and private-sector procurement opportunities. Winning these contracts often requires our clients to scale up, leading to job creation.
- **Facilitated Access to Global Markets Opportunities.** MBDA has established a joint statement with the ITA Global Markets division to help MBEs access resources to navigate the complexities of exporting, such as compliance, logistics, and tariff regulations. Our clients were better equipped to export, often scaling up operations and creating and retaining jobs.
- **Provided Business Development Services.** MBDA Business Centers and several other programmatic investments offered technical assistance, training, and mentorship to help MBEs grow their businesses. These growth-oriented businesses typically created and retained jobs as they expanded.
- **Promoted Innovation and Technology Development. MBDA** programs encouraged MBEs to participate in innovation ecosystems, including initiatives like the Small Business Innovation Research (SBIR) program. These opportunities can lead to job creation in research, development, and commercialization.
- **Driving Regional Economic Development.** MBDA invested in projects that target key industries, such as construction, cyber security, energy, and infrastructure, where growth stimulated job creation among MBEs and their communities.

Performance Indicator Results

Class	Operating Unit	Performance Indicator	FY 2020 Actual	FY 2021 Actual	FY 2022 Actual	FY 2023 Actual	FY 2024 Actual	FY 2024 Target	FY 2024 Status
Current/ Recurring	EDA	Number of Jobs created/ retained for grants made in underserved populations and geographies	—	—	171,718	16,361	16,721	14,725	Exceeded
Current/ Recurring	NOAA	Number of protected species designated as threatened, endangered or depleted with stable or increasing population levels	28	26	24	21	22	21	Met
Current/ Recurring	EDA	Anticipated Private Investment to be Leveraged in Underserved Areas (in millions)	—	—	$12,422.50 M	$2,521.91 M	$2,143.93 M	$2,269.72 M	Met
Current/ Recurring	NOAA	Fish Stock Sustainability Index (FSSI) 3.0	788.5	791.0	788.5	780.5	785.5	782.5	Met

Strategic Conclusions

While challenges persist regarding the ability to expand equitable access to opportunities, build economic resilience, and address climate-related issues, the Department made significant progress. EDA, NOAA, BEA, and NIST all contributed through sound investments, sustainable practices, workforce development, and comprehensive data analysis. These efforts lay a strong foundation for tackling future challenges and other initiatives aimed at promoting inclusive and sustainable growth across the Nation.

NOAA's Status of the U.S. Fisheries report for 2023 was released in April 2024 and showed 94 percent of the stocks managed with known status are not subject to overfishing and 82 percent were not overfished. This showed that the U.S. fishery management system is achieving its long-term sustainability goals. Three fewer stocks were subject to overfishing and one fewer stock was overfished compared to 2022. One additional stock was rebuilt for a total of 50 since 2000. Ending overfishing and rebuilding stocks supported $321 billion of commercial and recreational sales and 2.3 million jobs across the broader economy in 2022. However, warming waters have led to rapid shifts in fish species distribution that have impacted whole fishing communities. The challenge moving forward will be to provide the science needed to further integrate climate change considerations into an ecosystem approach to fisheries management and to model and forecast the effects of changing ocean conditions and habitats on fish stocks and seafood productivity.

MBDA programs and strategic relationships supported MBE growth and development which have resulted in MBE job creation and retention. Additionally, MBDA's CRP helped foster job growth by assisting MBE founders to start new businesses, grow and scale. MBDA's strategic initiatives and partners offer additional sources of economic opportunities that can impact MBEs and ultimately job creation.

STRATEGIC OBJECTIVE 2.2 – Build sustainable, employer-driven career pathways to meet employers' need for talent and to connect Americans to quality jobs

Lead Operating Unit: EDA
Contributing Operating Units: All Operating Units

Key Strategies:
- Invest in employer-driven regional workforce education and training systems that lead to quality jobs
- Foster transformative employer practices to address their challenges in recruiting and developing a diverse, skilled workforce
- Produce and disseminate timely, clear data and information to help Americans discover and participate in opportunities for skills development and economic advancement

Executive Summary of Progress

Creating jobs and fostering a skilled workforce are essential to promote equity and ensure that all Americans can thrive. By investing in the skills and capabilities of our workforce, the Department empowers individuals to secure quality jobs that meet the evolving needs of employers and foster innovation and competitiveness in our economy. In FY 2024, the Department made significant strides to advance this objective through targeted investments, resources, and a holistic approach to address barriers to access.

Economic Development Administration (EDA)
EDA published the FY 2024 Good Jobs Challenge (GJC) Notice of Funding Opportunity (NOFO), supported under the Consolidated Appropriations Act, to invest $25 million in employer-driven regional workforce education and training systems. This NOFO focused on creating sectoral partnerships that train and place workers in key technology areas such as advanced energy, biotechnology, robotics, and semiconductors, which strengthens the economic and national security of the United States. This is especially important given the investment EDA is making in the Tech Hubs program. The GJC is helping to build a strong workforce to ensure that American workers are skilled and available to take advantage of the future work opportunities created by the tech hubs. This effort will support the success of the hubs.

During the application process, EDA provided resources and technical assistance to applicants to enhance their proposals and to ensure that applicants have access to the most recent and insightful materials available for their work, regardless of whether they receive an award. Additionally, Good Jobs Challenge (GJC) grantees funded under the American Rescue Plan Act further implemented their training programs. These programs are opening new opportunities for workers in historically underrepresented industries, effectively reaching communities and individuals who can benefit most from training. For example, 18% of participants in GJC-supported skilled trades programs are women, significantly higher than the national average of 10% for

women in skilled trades. These programs are also increasing the proportion of women in construction, clean tech, manufacturing, and transportation distribution and logistics industries.

GJC grantees also provided comprehensive wrap-around services, including transportation, career and learning support, childcare, mental health services, and other assistance to break down barriers that have prevented many American workers from benefiting from such programs in the past. The Good Jobs Challenge Community of Practice (CoP), led by Jobs For the Future (JFF), facilitated networking, peer learning, and shared best practices with all 32 GJC grantees. JFF assisted grantees with identifying and removing systemic barriers. It also supported outreach to underserved communities to ensure a diverse and skilled workforce.

EDA also funded other workforce-related projects. In FY 2024, EDA announced $184 million in funding to support projects that create quality jobs, foster economic growth, and improve infrastructure for six awardees in communities spanning 20 states and territories, under the Distressed Area Recompete Pilot Program. These investments are intended to connect Americans to good-paying jobs by addressing regional economic disparities and improving local workforce capabilities. In July 2024, EDA announced $504 million in funding for 12 Regional Technology and Innovation Hubs across the United States. These hubs aim to strengthen U.S. economic and national security by fostering innovation, creating high-quality jobs, and ensuring that the benefits of emerging technologies are shared across diverse communities.

For its base programming, EDA invested over $153 million in 110 economic development planning and implementation projects that support workforce education and skills training activities directly connected to the hiring and skills needs of the business community. Workforce development remains a key investment area, and through these various targeted investments, EDA aims to create jobs, ensure American workers remain competitive and adaptable in the global job market, and prepare them for the challenges and opportunities of the future.

In an effort to foster greater diversity and enhance educational opportunities in the field of international commerce, the International Trade Administration (ITA) launched its U.S. and Foreign Commercial Service (USFCS) Fellowship Program. This program offers graduate students from diverse backgrounds pursuing degrees in international affairs, international relations, international studies, economics, business, trade, public administration, and public policy an opportunity to increase their knowledge and awareness of the Department's efforts to promote American exports and facilitate trade and commerce around the world.

Performance Indicator Results

Class	Operating Unit	Performance Indicator	FY 2020 Actual	FY 2021 Actual	FY 2022 Actual	FY 2023 Actual	FY 2024 Actual	FY 2024 Target	FY 2024 Status
Current/ Recurring	MBDA	Number of jobs by MBE clients	—	11,011	28,829	18,975	21,304	13,181	Exceeded
Current/ Recurring	EDA	Anticipated Jobs Created/Retained through Workforce Development Grants	—	—	85,264	11,099	13,808	9,989	Exceeded
Current/ Recurring	EDA	Anticipated Private Investment leveraged for Workforce Development (in millions)	—	—	$4,703.44 M	$245.87 M	$718.60 M	$221.29 M	Exceeded

Strategic Conclusions

EDA successfully implemented targeted investments throughout its programming, fostering collaborations that align workforce education with employer needs and addressing barriers to workforce access. The Department's emphasis on equity within programs has helped to ensure that all Americans are given the opportunity to thrive and remain competitive in the job market. By remaining flexible and adaptable to the changing demands of employers, the Department can improve the long-term success of these initiatives.

STRATEGIC OBJECTIVE 2.3 – Advance entrepreneurship and high-growth small and medium-sized enterprises

Lead Operating Unit: EDA
Contributing Operating Units: Census, ITA, MBDA, NIST, USPTO

Key Strategies:
- Provide support to entrepreneurs to help businesses form and grow
- Promote inclusive entrepreneurial ecosystems by addressing barriers to entry that prevent the participation of historically underrepresented communities
- Enable access to data and evidence to spur entrepreneurship

Executive Summary of Progress

The Department showed its commitment to fostering entrepreneurship, innovation, and economic development across the United States through targeted initiatives and strategic support. Key programs from the Economic Development Administration (EDA), the United States Patent and Trademark Office (USPTO), the International Trade Administration (ITA), and the Minority Business Development Administration (MBDA) have collectively advanced this objective by providing essential tools and resources, funding, and strategic guidance to entrepreneurs and small and medium-sized enterprises (SMEs). These initiatives support the entrepreneurial ecosystem and lay the foundation for sustainable economic growth and job creation, particularly for historically underserved communities.

One such initiative is EDA's $50 million Notice of Funding Opportunity (NOFO) for the Build 2 Scale (B2S) program, which supports organizations that help entrepreneurs in building and scaling technology-driven businesses. Equity was a key element in the application process, and EDA collaborated with the State Science and Technology Institute (SSTI)to provide tools like the Rural and Persistent Poverty Map to help identify eligible counties and provide other data insights and analysis to help organizations identify opportunities and prepare proposals. The FY 2024 NOFO also encouraged using data-driven approaches to support innovators and entrepreneurs in transforming ideas into marketable products and services. Notably, EDA implemented a new benefit for areas designated as Tech Hubs or National Science Foundation (NSF) Engines. This means that B2S proposals that were aligned with Tech Hubs or NSF strategies received additional consideration. This strategic alignment aims to maximize the impact of investments and ensure regional innovation and growth.

Similarly, EDA's Revolving Loan Funds (RLF) program supports entrepreneurs by providing access to capital as gap financing to enable small businesses to grow and generate new employment opportunities, particularly benefiting women and minority-owned businesses. In FY 2024, grantees across all active RLF made 736 loans totaling more than $82.4 million. These loans provided access to financing that enabled small businesses to grow and generate new

employment opportunities. RLF grantees that received loans during FY 2024 reported that the loans are expected to attract over $336.2 million in private investment. These loans will also enable businesses to retain at least 3,253 jobs while creating at least 4,016 new jobs.

Another noteworthy initiative was EDA's Recompete pilot program, which provides flexible investments to regions where prime-age employment (i.e., for individuals between the ages of 25 and 54) lags the national average. In FY 2024, EDA announced $184 million in six recompete awards to create opportunity in economically distressed communities through good-paying, high-quality jobs and improve access to the workforce for Americans. This includes funding for workforce training, wraparound services, critical infrastructure, entrepreneurship, and small business support. By strengthening these communities with essential resources and support, the program creates quality jobs and nurtures the growth of entrepreneurship and small and medium-sized enterprises (SMEs), driving local economic development and innovation.

To further support the entrepreneurial ecosystem, the National Advisory Council for Innovation and Entrepreneurship (NACIE), led by EDA, released its Competitiveness Through Entrepreneurship: A Strategy for U.S. Innovation report which outlines ten recommendations to strengthen American leadership in technology innovation. These recommendations focus on increasing research and development, enhancing entrepreneurial ecosystems, and ensuring diversity, equity, and inclusion in business growth. The report emphasizes the importance of federal and private sector collaboration to drive innovation and maintain America's competitive edge in the global market. These strategies aim to foster an environment where entrepreneurs can thrive and contribute to long-term economic success.

USPTO expanded its offerings and partnerships to help innovators identify available funding sources, both public and private, for bringing their innovations to impact the public good. To further promote American competitiveness and economic growth, USPTO partnered with other federal agencies that fund research and development and provided intellectual property (IP) education and outreach to drive federally funded innovations to the American people. USPTO partnered with EDA's Tech Hubs Program to strengthen U.S. economic and national security. Tech Hubs events offered opportunities to discuss USPTO initiatives regarding IP policy, rights, protection, and resources, and identify other collaborative forms of IP education.

In FY 2024, USPTO collaborated with other agencies on over 200 engagements. These engagements were delivered both in person and virtually and provided information on services and resources offered by USPTO to individuals who receive research and development funding from other federal agencies. USPTO coordinated these opportunities with federal agencies including the Small Business Administration, National Science Foundation (NSF), Department of Energy, Minority Business Development Agency (MBDA), NASA, and the National Institutes of Health/National Institute on Aging. These opportunities helped advance USPTO's mission to increase participation in the innovation ecosystem and educate people on the purpose and value of intellectual property and resources available to bring innovation to impact. USPTO refined its offerings to increase the frequency of coordinated information delivery to shared stakeholders and assessed the impact through the proportion of events that provide access to interagency resources.

Additionally, USPTO's Council for Inclusive Innovation (CI[2])—which counts among its members corporate, academic, professional, and government IP leaders— tapped into the strength of American diversity and amplified opportunities for participation in the innovation ecosystem. In May 2024, USPTO released the National Strategy for Inclusive Innovation, a comprehensive national blueprint for growing the economy, creating quality jobs, and addressing global challenges through a dynamic and thriving innovation system. The strategy's four cornerstones laid the foundation for inclusive

innovation, and its 11 recommendations will help schools, industry, and other organizations grow the innovation ecosystem in the 21st century. An appendix contains more than 70 best practices and example programs targeted at decision-makers, complete with descriptions and links to resources for developing successful inclusive innovation policies. Please visit USPTO's website for more information.

With over 80 percent of its FY 2024 export client base represented by SMEs, the International Trade Administration (ITA) provided export solutions to support this demographic, including minority-owned and historically disadvantaged businesses, to overcome the challenges associated with exporting and attracting inward investment. As part of the Global Diversity Export Initiative (GDEI), ITA's Building Bridges to Global Markets program focused on SMEs from underserved business communities and provided in-person export support. The eight Building Bridges events held in FY 2024 directly supported over 2,000 American companies to better understand the impact of exporting and the valuable resources available through ITA and other federal agencies. ITA also signed ITA Strategic Partnerships with 18 GDEI organizations across the United States and delivered two GDEI-focused Trade Missions. ITA offered ExporTech to SMEs around the country, providing them with coaching, export counseling, and tools to develop an export strategic plan. ITA partnered with the National Business League to create a pilot Global Diversity ExporTech for SMEs from underserved communities. ITA also hosted the 14th annual Trade Winds in Istanbul, Turkey, the U.S. Government's largest annual trade mission and business development forum. ITA led over 120 American businesses, many of them SMEs, to the three-day business forum and trade missions which resulted in 763 business-to-government meetings with American commercial diplomats and trade experts based in over 30 countries across and 538 business-to-business meetings with potential buyers, distributors, and partners. Additionally, ITA opened six new Rural Export Centers located in West Virginia, Iowa, Nevada, Idaho, Kentucky, and Mississippi to empower rural American companies to thrive in international markets through actionable market intelligence and global connections.

In October 2023, the Secretary of Commerce announced ITA's 2023 Market Development Cooperator Program (MDCP) award recipients, Association for Advancing Automation (A3) and Medical Alley. Through the MDCP partnership and financial support, A3 will support American firms in expanding exports of robotics equipment and services to Mexico and India, while Medical Alley will expand U.S. exports of specialized healthcare consulting services to the UK, the Netherlands, and Romania. ITA's MDCP partners with nonprofit industry groups, which are effective in reaching SMEs. These groups compete for MDCP awards by proposing innovative projects that address trade barriers, enhance industry competitiveness, and generate exports. On average, MDCP projects generate over $286 in exports for every federal dollar invested.

In FY2024, MBDA funded a national network of Business Centers and other technical assistance programs, including but not limited to the Federal Procurement Center, Minority Business Enterprise Equity Multiplier, Enterprising Women of Color, Tribal Program, Minority Colleges and Universities Program, and the Capital Readiness Program (CRP). These MBDA programs spanned across the United States and Puerto Rico, supporting minority business enterprises (MBEs) and socially and economically disadvantaged individuals (SEDIs).

MBDA's national network of Business Centers, Federal Procurement Center, and other projects aim to close the entrepreneurial gap among minority business enterprises (MBEs). These programs supported MBEs by providing technical assistance that resulted in tangible economic benefits in revenue (i.e., contracts, procurements, and other revenues), capital (i.e., loans, financing, bonding, venture capital, etc.), and capacity building.

The CRP is MBDA's newest program that is designed to help close the entrepreneurship gap for socially and economically disadvantaged individuals (SEDIs). The CRP is comprised of a geographically dispersed network of CRP service providers that help SEDI entrepreneurs launch and/or scale existing businesses, access the U.S. Treasury Department's State Small Business Credit Initiative (SSBCI) capital, and participate in other governmental programs that support small businesses and secure other forms of capital.

MxD announced a new partnership with the National Institute of Standards and Technology's (NIST) Hollings Manufacturing Extension Partnership (MEP) in FY 2024 to advance digital adoption by small and medium-sized manufacturers (SMMs). The five-year collaboration will help strengthen America's manufacturing base and increase competitiveness by delivering tailored support to SMMs to accelerate digital adoption initiatives, including cybersecurity preparedness, and securing funding opportunities that directly benefit SMMs. To date, MxD has committed to deliver over 100 technology demonstration kits to at least 7 MEP centers across the country: Illinois, Iowa, Tennessee, Rhode Island, Pennsylvania, Georgia, and Kentucky. These kits are low-cost technology demonstrations that show SMMs the value of digitizing their manufacturing processes and their factories.

In FY 2024, NIST issued a Notice of Funding Opportunity (NOFO) seeking proposals from eligible applicants for activities to establish and operate a CHIPS Manufacturing USA institute focused on digital twins for the semiconductor industry. CHIPS for America anticipates investing at least $285 million in a CHIPS Manufacturing USA Institute to create a first-of-its-kind digital twin center to lead the world in revolutionizing semiconductor and advanced packaging manufacturing. The CHIPS Manufacturing USA Institute will foster a collaborative environment to significantly expand innovation, bring tangible benefits to both large and small-to-medium-sized manufacturers, strengthen diverse research institutions, and ensure a national reach in workforce development.

In FY 2024, NIST announced an open competition for a new Manufacturing USA institute focused on using AI to increase the resilience of American manufacturing. NIST anticipates funding up to $70 million over a five-year period for the recipient to establish and operate the new institute. The institute will be required to obtain cost-share funds from non-federal sources.

The Hollings MEP published a new interactive map to help manufacturers find workforce-related programs and services offered by MEP Centers in every state and Puerto Rico. The map shows MEP workforce activities across the country, enabling manufacturers and the public to learn more about what each MEP Center does.

NIST announced the launch of the enhanced manufacturing.gov website, a primary hub for information about federal manufacturing programs, funding opportunities, and other valuable resources. The website provides a central location for descriptions and contact information for federal programs, open funding opportunities, topic-focused pages, and announcements from the White House and federal agencies related to American manufacturing.

Performance Indicator Results

Class	Operating Unit	Performance Indicator	FY 2020 Actual	FY 2021 Actual	FY 2022 Actual	FY 2023 Actual	FY 2024 Actual	FY 2024 Target	FY 2024 Status
Current/ Recurring	NIST	Growth in workforce services provided to small to midsized U.S. manufacturers	—	—	2,400	3,119	3,873	2,974	Exceeded
Current/ Recurring	NIST	Growth in number of small to midsized manufacturers participating in MEP knowledge sharing events	—	—	2,590	3,581	4,240	3,906	Exceeded
Current/ Recurring	EDA	Funding Secured Via EDA Support	—	—	$72.65 M	$69.57 M	$102.96 M	$62.63 M	Exceeded
Current/ Recurring	NIST	Growth in technology services provided to small to midsized U.S. manufacturers	—	—	1,600	1,492	1,565	1,582	Exceeded
Current/ Recurring	EDA	Investment in Innovation Capacity Building	$166.34 M	$258.14 M	$1,337.70 M	$35.93 M	$328.09 M	$122.50 M	Exceeded

Strategic Conclusions

The Department's initiatives made progress supporting the entrepreneurial ecosystem, with notable achievements across various programs. EDA's B2S program has been instrumental in enhancing entrepreneurial ecosystems by funding organizations that support technology-driven businesses. The focus on equity and strategic alignment with Tech Hubs and NSF Engines will maximize the impact of these investments, ensuring regional innovation and growth. Similarly, EDA's Revolving Loan Fund (RLF) program provided critical gap financing to small businesses, particularly benefiting women and minority-owned enterprises. Additionally, the Recompete pilot program will address regional employment disparities by investing in workforce training, infrastructure, and small business support.

USPTO offers many programs to help with education and outreach efforts, each designed to help all Americans understand the benefits of protecting their IP. The agency's long-term goal is to develop and empower a new generation of knowledgeable IP rights holders who stimulate the U.S. economy by enabling patent and trademark examination efficiency. Please visit USPTO's website for more information.

MBDA recognizes that access to capital and access to contracting are significant challenges for MBEs. MBEs are more likely to be denied credit, rely on credit cards, pay higher fees, and utilize non-traditional lenders. Similarly, venture capital (VC) funding for Black founders in 2023 decreased by 71% compared to 2022 and represented the lowest amount since 2016. This decline far outpaced the overall decrease in startup funding (37%). Likewise, Latinx founders experienced an over 80% decline in the third-quarter of 2022, which represented both quarter-over-quarter and year-over-year decrease.

When it comes to contracting, MBEs disproportionately lag in securing opportunities. The Federal government (and private sector) spend hundreds of billions of dollars in contracts to procure goods and services annually. Yet, MBEs are less likely to win Federal contracting opportunities. That is why MBEs seek technical assistance to access, compete, and secure contracting opportunities.

In FY 2024, MBDA's national program network met the needs of MBEs by providing technical assistance to do business with Federal, state and local governments, and the private sector. These programs also assisted MBEs to secure capital. Together these forms of assistance helped strengthen MBE capacity to support business growth.

ITA's Global Diversity Export Initiative (GDEI) and other export support programs have empowered SMEs from underserved communities to overcome export challenges and access global markets.

STRATEGIC OBJECTIVE 2.4 – Expand affordable, high-quality broadband to every American

Lead Operating Unit: NTIA
Contributing Operating Units: Census, EDA

Key Strategies:
- Invest Federal funds to support equitable deployment, access, and adoption of broadband
- Accelerate broadband expansion through the alignment, coordination, tracking, and measurement of cross-Federal Government broadband programs
- Create and retain high-quality jobs to support broadband infrastructure deployment and utilization
- Maintain, operate, and improve the Nationwide Public Safety Broadband Network and advance first responder communications solutions

Executive Summary of Progress

National Telecommunications and Information Administration (NTIA)
In FY 2024, NTIA's Office of Internet Connectivity and Growth (OICG) administered programs that invested in broadband infrastructure, adoption, and use projects, that focused on communities of greatest need. In FY 2024, OICG executed multiple grant programs that committed funds to award over $33.3 billion.

- Broadband Equity, Access, and Deployment (BEAD) Program: All states and territories submitted their Initial Proposals detailing their infrastructure deployment plans. NTIA approved 43 Initial Proposals.
- Digital Equity (DE) Act Programs:
    - State DE Capacity Program: NTIA launched the first Notice of Funding Opportunity (NOFO) for the State DE Capacity program, making $810,400,000 available to states, territories, and native entities to implement their digital equity plans. All states and territories submitted their applications, and they are currently being reviewed by NTIA. In FY 2024, NTIA approved 17 awards.
    - DE Competitive Grant Program: NTIA also launched the DE Competitive Grant program making available $925,000,000 to support efforts to achieve digital equity, promote digital inclusion activities, and spur greater adoption and meaningful use of broadband among the covered populations.
- Tribal Broadband Connectivity (TBCP) Programs: NTIA reviewed more than 160 applications received through the second TBCP NOFO, in which up to $980 million was made available to Tribal governments to support broadband deployment, adoption, and use projects on tribal lands.

In FY 2024, OICG engaged in extensive technical assistance by developing materials to support grant applicants and awardees and by coordinating outreach to key stakeholders, including, but not limited to state, local, and Tribal governments. NTIA held:

- 19 State Broadband Leaders Network (SBLN) meetings, including 2 conferences held in-person.
- 6 Digital Equity Leadership Network (DELN) meetings
- 11 Tribal Equity Leadership Network (TELN) meetings
- 28 Webinars

In FY 2024 OICG promoted collaboration with interagency colleagues to align on common policies and practices, reduce duplication, and fulfill statutory coordination activities. Key Federal Interagency Broadband Coordination efforts included:

- NTIA facilitated regular meetings with the U.S. Departments of Agriculture and Treasury and the Federal Communications Commission (FCC) in alignment with the Broadband Interagency Coordination Agreement (BICA) and an additional interagency Memorandum of Understanding (MOU) signed with Treasury in 2022 and extended in FY 2024.
- NTIA and Rural Utilities Service (RUS) signed an MOU in August 2024 and began to implement the procedures outlined in the MOU. This MOU aims to promote enhanced coordination with the Rural Utilities Service (RUS) ReConnect program, which is essential to the success of the uniquely structured and complex BEAD program.
- NTIA led the development of deduplication principles, recommended policies, and a standard high-level process across Federally funded broadband projects; NTIA co-hosted 17 Federal Funding Workstream meetings which brought together Federal agencies with broadband initiatives to share and learn about the work being done on broadband across the federal government. Additionally, NTIA invited colleagues from across OICG to share information about our programs to promote visibility and encourage collaboration with other federal colleagues. OICG presenters included representatives from Tribal Broadband Connectivity Program (TBCP), Office of Minority Broadband Initiatives, DE, Middle Mile and BEAD.
- Expanded public awareness of federal funding sources, U.S. Government investments in broadband, and the economic impact of those investments:
  - NTIA conducted the annual update of BroadbandUSA's Federal Funding website, a one-stop site for broadband funding resources.
  - NTIA published the third annual Federal Broadband Funding Report and Dashboard, developed in coordination with 13 federal agencies comprising 70 total programs. This report highlights investments in federal broadband support programs and Universal Service Fund programs. It also summarizes the federal broadband investment landscape and provides a framework for the economic impact analysis.
  - NTIA partnered with the Census Bureau to develop the ACCESS BROADBAND Dashboard. It includes a series of maps showing broadband access and adoption measures as well as local and regional economic outcomes that research suggests could be influenced by expanding access to broadband. Additionally, to ensure coordination between NTIA stakeholders and key federal agencies, OICG facilitated presentations by the FCC, Treasury, and RUS to the State Broadband Offices and State Broadband Leaders Network gatherings.

FirstNet Authority (FirstNet)
FirstNet and its network partner/contractor, AT&T completed the initial buildout of the FirstNet network. The buildout exceeds 100 percent of nationwide coverage targets identified in the AT&T service contract, across more than 2.97 million square miles throughout the United States and its territories. As of July 2024, the FirstNet network serves over 28,500 public safety agencies and organizations, accounting for more than 6.1 million

connections, across all 56 states and territories. Over 800+ devices are available for first responders to use on the FirstNet network to support their unique operational needs. Task Order 11 for 5G network evolution was awarded on January 30, 2024, and is currently in the execution phase. Work has commenced for the generational upgrade to the 5th generation mobile network (5G). Additionally, the FirstNet Authority is working towards the review of the 5G standalone architectural design and approach against the requirements and specifications outlined in the Nationwide Public Safety Broadband Network (NPSBN) contract.

FirstNet hosted over 1,500 engagements across all states and territories, levels of government, and disciplines gathering feedback on FirstNet's impact on public safety operations. Engagement included educating public safety about FirstNet services and capabilities, as well as post incident and event reviews and pre-planning activities.

Performance Indicator Results

Class	Operating Unit	Performance Indicator	FY 2020 Actual	FY 2021 Actual	FY 2022 Actual	FY 2023 Actual	FY 2024 Actual	FY 2024 Target	FY 2024 Status
Current/ Recurring	NTIA	Percentage of planned coverage achieved	60%	80%	95%	100%	100%	100%	Met
Current/ Recurring	NTIA	Percentage of public safety adoption targets achieved	69%	87%	100%	100%	121%	100%	Exceeded
Current/ Recurring	NTIA	Number of Applicant and Grantee Technical Assistance Engagements	—	—	94	114	230	75	Exceeded
Closing Out	NTIA	Total amount of NTIA grant funds obligated for broadband-related programs.	—	—	$1.70 B	$2.02 B	$35.01 B	$36.30 B	Met

Strategic Conclusions

NTIA has made and will continue to make progress in delivering on the strategy to ensure all Americans have universal access to broadband and supporting broader economic growth through jobs created and retained. The FirstNet Authority NPSBN program is firmly on track and exceeding program contractual deliverable requirements. FirstNet tracks closely the performance of the program outcomes. FirstNet Authority senior leadership hold regular briefings with NTIA to ensure that deadlines are attained, and the public is served by its work. The FirstNet Authority's quarterly briefings with the Deputy Secretary of Commerce have been a productive venue to review progress, monitor program goals, and ensure the multi-billion-dollar initiative is achieving its goals and remains on track to meet its vital public safety mission.

STRATEGIC OBJECTIVE 3.1 – Increase the impact of climate data and services for decisionmakers through enhanced service delivery and improved weather, water, and climate forecasts

Lead Operating Unit: NOAA

Key Strategies:
- Transform ocean, weather, water, and climate information dissemination and service delivery to better and more equitably serve decisionmakers and meet evolving societal needs
- Increase and strengthen partnerships across government, industry, academic, and nonprofit organizations to improve NOAA's suite of climate data and services in response to increasing demand for support services
- Enhance predictive forecasts for extreme, high-impact ocean, weather, water, and climate events
- Enhance observational infrastructure

Executive Summary of Progress

National Oceanic and Atmospheric Administration (NOAA)
In FY 2024, NOAA made progress in building a Climate Ready Nation by amplifying the delivery of climate data and services for decision makers, as illustrated by the advancement of key initiatives to enhance outcomes, particularly in socially vulnerable communities. NOAA and its partners launched several websites as part of the effort to improve service delivery of weather, water, and climate forecasts and information while aiding communities in building resilience against the impacts of climate change. NOAA also made notable progress in satellite initiatives to advance the detection and monitoring of weather and the environment, contributing to the protection of life and property and enhancement of the national economy. Additionally, NOAA made progress in the following areas:

NOAA Progressed Toward Transforming NWS Operations
NOAA accelerated progress toward transforming the National Weather Service (NWS) operations through several initiatives to amplify shoulder-to-shoulder engagement with NOAA/NWS core partners and enhance outcomes in socially vulnerable communities, including implementation of:
- NWS Connect Operating Capability, a tool that increases capacity to understand, interpret, and communicate risk-based/probabilistic information to drive and enhance Impact-based Decision Support Services (IDSS) with core partners across the extensive geographic footprint of the agency.
- Data Lake Prototype, which is a demonstration of a data repository for observational data currently only available on the nation's Weather and Climate Operational Supercomputing System (WCOSS) for use in other applications throughout NWS.

- A Minimum Viable Product (MVP) of Weather.gov 2.0, which is a step toward nationwide deployment of a nimble, mobile, and flexible Weather.gov 2.0 website experience that better meets the needs of the American public and NWS partners.
- National Blend of Models (NBM) version 4.2, which provides an update to ensemble models critical to advancing forecast production for the Future Operating Model and Probabilistic IDSS.
- An upgrade to Dynamic Ensemble-based Scenarios for Impact-based Decision Support (DESI) version 3.0, a web and cloud-based application that is used by the NOAA to analyze weather data (e.g., precipitation, heat) which is a powerful decision support system used to provide forecasters, decision-makers, and other stakeholders with ensemble-based weather forecast information and visualizations.

Climate Service Delivery
In efforts to increase the impact of climate data and services for decision makers through enhanced service delivery and improved weather, water, and climate forecasts, NOAA and its partners launched ClimateEngine.org, an innovative tool that provides satellite and climate data in a user-friendly manner to facilitate water conservation, wildfire risk management, agricultural productivity monitoring, and ecological restoration.

Enhanced Environmental Satellite Observational Infrastructure and Predictive Forecast Capabilities
NOAA successfully launched GOES-U on June 25, 2024, the fourth and final satellite in the Geostationary Operational Environmental Satellites (GOES)-R Series. GOES-U, now in geostationary orbit and renamed GOES-19, will enhance NOAA's ability to provide critical data for advanced detection and monitoring of weather and environmental phenomena, thereby improving public safety and promoting our nation's economic health and prosperity. The Space Weather Next (SW Next) satellite program Lagrange Points 1 and 5 (L1 and L5) moved toward the development phase, which includes vendor contract awards. New capabilities at L1 and L5 will help improve space weather forecasting to safeguard national infrastructure and the public. The next-generation Near Earth Orbit Network (NEON) program entered the formulation phase in March 2024. NEON will develop a resilient constellation of low-Earth orbit satellites that will enhance weather forecasting, disaster management, and understanding of global climate change impacts.

Advanced Wildfire Warning Capabilities
NOAA advanced its wildfire warning capabilities using Bipartisan Infrastructure Law (BIL) funds to address the urgent needs of firefighters, first responders, and NOAA's Incident Meteorologists who provide support during fire events. NOAA developed the Next Generation Fire System which allows automated early fire detection and trends in fire intensity and spread, integral to the planned expansion of National Weather Service fire warnings. NOAA also developed and demonstrated a customized version of the LightningCast model that provides advanced warning prior to the onset of lightning and hazardous conditions.

Strengthened Partnerships with Industry Sectors to Improve Climate Data Services
NOAA enhanced engagement and strengthened partnerships with the insurance/reinsurance, retail, and engineering sectors using funds from the Inflation Reduction Act (IRA). This included conducting monthly engagements with the sector partners. NOAA and the Reinsurance Association of America entered into a Memorandum of Understanding in July 2024 aimed at enhancing data sharing, risk assessment, and resilience planning. These efforts improve the delivery of data and information to multiple sectors to help them mitigate the impacts of climate change and develop risk models for underserved communities.

NOAA Enhances Flood Services and Water Prediction Information

NOAA NWS National Water Center used BIL funds to implement near real-time Flood Inundation Mapping (FIM) services for more than 36% of the American population in FY 2024. These publicly available services, which leverage forecasts from the National Water Model, provide emergency managers actionable, street-level flood inundation maps depicting the area and infrastructure impacted by flood waters. FIM services are the single biggest advancement in flood warning capability in the history of the NWS. NOAA also delivered a major enhancement to the primary web portal to water prediction information as part of the March 2024 deployment of the National Water Prediction Services webpage which has received 22 million page views since its launch. It provides the public a modern user interface and expanded data content through the inclusion of new flood inundation mapping, National Water Model forecast information, and a robust suite of data services.

NOAA Enhances Heat Risk Information to Reduce Heat-related Illness and Death

To foster equity, NOAA used Inflation Reduction Act (IRA) funds to establish two new National Integrated Heat Health Information System (NIHHIS) Centers of Excellence. These centers improve equitable community heat resilience through community science projects and improve the state of the science and practice by learning from, scaling up, and openly sharing approaches, policies, protocols, and lessons to benefit all communities. NOAA also expanded the availability of a new experimental heat tool called HeatRisk, which is a collaboration between NOAA's NWS and the Centers for Disease Control and Prevention (CDC). The tool incorporates 2023 NIHHIS Urban Heat Island mapping campaign data and maps, a heat dashboard using NOAA data, and expert content from NOAA and other agencies / non-federal experts. Heat.gov is the web portal for NIHHIS, whose mission is to build societal understanding of heat risks to develop science-based solutions and improve capacity, communication, and decision-making to reduce heat-related illness and death. During the heat wave of June 2024, HeatRisk page views surged to 80,000 which is 15 times the average number of daily views during the warm season, thus illustrating its utility for decision-making and preparatory activities to reduce the impacts of heat.

NOAA Strengthens Ocean, Coastal, and Great Lakes Observing Systems

Using IRA funds, NOAA awarded $101.5 million to the U.S. Integrated Ocean Observing System Regional Associations to enhance coastal, ocean, and Great Lakes observing systems with a focus on strengthening climate resilience, including addressing urgent needs for water level and wave observation monitoring. NOAA also used BIL funding to recapitalize three stations in the National Ocean Service's National Water Level Observing Network (NWLON), which supports safe marine navigation and helps communities assess their risk from long-term sea level change.

NOAA Launches Multilingual Website

NOAA launched a multilingual website to prototype automated enterprise multilingual translation capability for National Weather Service products and services. This website, which averages over 2,000-page views daily, dramatically improves service equity to traditionally underserved and vulnerable populations by enhancing the accessibility of vital, life-saving information by making urgent weather updates available in multiple languages. This was illustrated by site traffic soaring to between ten and fifteen thousand page views per day ahead of Hurricanes Helene and Milton in Florida.

NOAA Broadens Climate Services to Underserved Communities

Through seven Climate and Equity pilot projects, NOAA increased its climate service delivery, community engagement resources, and knowledge sharing in the five priority areas of drought, extreme heat, coastal resilience, flooding, and food security to fight environmental injustice and protect lives and livelihoods. In collaboration with partners in underserved communities that are disproportionately impacted by extreme weather and climate events,

NOAA developed tailored, place-based climate adaptation strategies that enhanced resilience to climate hazards. This included NOAA's coordinated efforts with other federal agencies to support the Alaska Native Tribal Health Consortium's first Tribal Climate Initiatives Gathering in Anchorage, Alaska, on May 21-23, 2024, where over 100 participants with Tribal leadership from 10 regions across the state and Federal and State representatives learned about the regional realities of climate change facing Alaska Native communities.

NOAA Fleet Recapitalization
NOAA furthered the recapitalization of its fleet with three major ship programs. The most mature is the procurement of two Oceanographic Ships (Class A) through a Navy assisted acquisition. Currently, contract oversight is in progress, as the lead ship, *the OCEANOGRAPHER,* is approximately 70 percent complete in construction, while the follow-on ship, *the DISCOVERER*, is 63 percent complete. Additionally, the Class B, with a primary mission of charting and surveying, has been in preliminary design during FY 2024. NOAA has also developed requirements for the Class C in FY 2024 to procure up to three vessels with a primary mission of Assessing Living Marine Resources with trawl capability. This Class C program is in the pre-acquisition Phase and throughout FY 2024 NOAA has been working on SOW/Technical Specifications.

NOAA Aircraft Recapitalization
NOAA maintained its commitment to standardize major acquisitions by setting up an Aircraft Acquisition Program Management Office (PMO). The King Air Acquisition Program delivered a third King Air aircraft which was integrated into the operational fleet at the Aircraft Operations Center in Q1 FY 2024. The Gulfstream G550 Acquisition Program furthered Aircraft #1 airframe modifications at Gulfstream in Brunswick, GA. G550 aircraft #2 procurement was accomplished through a modification to the current contract award and occurred in Q4 FY 2024. The C-130J aircraft Acquisition Program received Milestone 2 Project Approval, and awarded a contract to Lockheed Martin Aeronautics, based in Marietta, GA, for two specialized C-130J Hercules aircraft to become the next generation of NOAA Hurricane Hunter aircraft.

NOAA Uncrewed Systems (UxS)
The Uncrewed Systems Operations Center improved and expanded uncrewed marine and uncrewed aircraft systems, collectively known as UxS operations, across NOAA in FY 2024 to gather mission-critical data. The Center acquired its second DriX corporate uncrewed surface vehicle and first Slocum underwater buoyancy glider. The Center partnered with NOAA National Marine Fisheries Service (NMFS) to explore the utilization of a DriX to survey offshore wind turbines in New England, to survey within 82 feet of a functional wind turbine, proving the functionality of UxS. A DriX was deployed with NOAA Ship the *Thomas Jefferson* to perform hydrographic surveys, with results improving survey productivity by an estimated 20%. On the aerial side, the Center distributed 28 new 'Blue Drone' certified uncrewed aircraft to programs across NOAA and trained 49 uncrewed aircraft operators to pilot and manage missions. The Center also supported 32 projects that facilitated the research, development, and transition to operations of UxS across the agency.

Performance Indicator Results

Class	Operating Unit	Performance Indicator	FY 2020 Actual	FY 2021 Actual	FY 2022 Actual	FY 2023 Actual	FY 2024 Actual	FY 2024 Target	FY 2024 Status
Current/ Recurring	NOAA	Number of Weather-Ready Nation Ambassadors serving socially vulnerable populations and U.S. businesses	—	—	7,157	7,330	7,481	7,380	Exceeded
Closing Out	NOAA	Number of forecast and mission improvements, based on The Weather Research and Forecasting Innovation Act of 2017, to weather applications at operational U.S. weather services and in the U.S. weather commercial sector	8	15	18	12	17	8	Exceeded
Current/ Recurring	NOAA	Number of instances in which NWS local forecasters confirm that Warn-on-Forecast System (WoFS) provided actionable guidance that influenced them to communicate a specific county-level tornado threat in public products or by personal communication to integrated warning team partners at least one hour in advance	—	—	4	9	9	4	Exceeded
Current/ Recurring	NOAA	Percentage of NOAA-managed satellite data processed and distributed within targeted time	99.43%	99.30%	99.59%	99.07%	98.82%	98.50%	Exceeded
Current/ Recurring	NOAA	Percentage of the continental U.S. population served by flood inundation mapping services	—	—	—	10%	36%	30%	Exceeded
Current/ Recurring	NOAA	Number of peer-reviewed publications related to environmental understanding and prediction	3,366	3,356	3,057	2,929	3,063	3,114	Met
Current/ Recurring	NOAA	Number of StormReady communities serving socially vulnerable populations and U.S. businesses	—	—	390	402	416	407	Exceeded
Current/ Recurring	NOAA	Accuracy of Day 3 extreme rainfall forecast			.13	.13	.16	.13	Exceeded

Strategic Conclusions

NOAA's social science research contributes to ensuring NWS forecasts are well communicated and understood by the public and the partners. System reliability will be improved to increase service quality during high-demand periods, further working towards addressing the Top Management Challenge of protecting life and property in a changing climate.

By maintaining and improving NOAA Operations and Services with its fleet of ships and aircraft, NOAA can reduce risk of gaps in critical observational capabilities. Both the NOAA Fleet and Aircraft Plans will be updated as scientific requirements demand platform modernization and service life restricts or prevents operational usage. Aircraft and ship recapitalization milestones will be accomplished to provide evidence of progress on acquiring scientifically advanced data collection platforms.

STRATEGIC OBJECTIVE 3.2 – Strengthen coastal resilience and advance conservation and restoration of lands and waters for current and future generations

Lead Operating Unit: NOAA
Contributing Operating Units: EDA

Key Strategies:
- Use data tools and public investments to improve coastal resilience
- Protect and restore coastal wetlands and coral reefs to sequester carbon, buffer storms and flooding, and foster biodiversity

Executive Summary of Progress

Bipartisan Infrastructure Law (BIL) and Inflation Reduction Act (IRA) investments have accelerated the National Ocean and Atmospheric Administration's (NOAA) efforts to advance coastal resilience, conservation, and restoration. In FY 2024, ongoing BIL- and IRA-funded projects awarded by the National Ocean Service (NOS) removed over 2.9 million pounds of marine debris and enabled the conservation of over 5,450 acres of coastal land. NOS also contributed to the White House's launch of products and services to help users meet new requirements to protect federally funded buildings and projects from flood risk. The beta release of the Federal Flood Standard Support Tool and website enables federal agencies and their non-federal partners to easily determine if federally funded activities are located in a designated floodplain.

Supported by IRA funding, NOAA formally designated the new Lake Ontario National Marine Sanctuary (NMS) and released the final rule to designate the Chumash Heritage National Marine Sanctuary (NMS). Lake Ontario NMS, encompassing 1,722 square miles of New York's eastern Lake Ontario, protects archaeological sites, shipwrecks, submerged aircraft, and other underwater assets from more than two centuries of the nation's modern history. Chumash Heritage NMS, covering 4,543 square miles in central California, protects habitats such as kelp forests, rocky reefs, and offshore seamounts. It also provides opportunities for the Office of National Marine Sanctuaries to better understand and preserve ancient village sites of the Chumash and other Indigenous cultures along the paleoshorelines (i.e., submerged ancient coastlines) in the area. These efforts support the America the Beautiful Initiative, which aims to conserve and restore 30% of U.S. lands and waters by 2030. NOAA also released draft designation documents for a proposed Papahānaumokuākea National Marine Sanctuary, which would provide additional protections for approximately 582,250 square miles of habitat, including coral reefs, seamounts, and abyssal plains 16,400 feet below sea level.

NOAA ensured that Indigenous communities and entities were provided opportunities to engage in these efforts and benefit from funded projects. Some examples include:
- NOAA highlighted the Chumash and other Indigenous cultures who have lived in the region for tens of thousands of years or more.
- NOAA provided over $750,000 to support tribal nations' participation in or engagement with regional ocean partnerships—collaborative organizations working to address ocean and coastal issues of concern.

- The Upper Mattaponi Tribe, using a marine debris award from NOS, protected 853 acres of culturally significant territory within the Chesapeake Bay watershed, honoring the tribe's heritage and rekindling its role as an environmental steward.

NOAA made additional investments in coastal resilience and conservation using BIL and IRA funds. The National Marine Fisheries Service (NMFS) invested approximately $1.1 billion, a net increase for FY 2024 and FY 2023, to support America's fisheries and communities through habitat restoration and coastal resilience efforts. This includes funding opportunities for:
- Fish passage projects that restore access to healthy habitats for migratory fish. Projects selected through these opportunities will support sustainable fisheries, recover threatened and endangered migratory fish, and strengthen the resilience of coastal and Great Lakes communities and tribes.
- Habitat restoration projects that support fisheries and protected species while also strengthening the resilience of coastal ecosystems and communities. Projects selected through these opportunities will have a transformative impact on coastal communities and tribes across the country.
- Capacity building and on-the-ground restoration projects that advance the coastal habitat restoration priorities of tribes and underserved communities. Projects selected through these opportunities will support community-driven habitat restoration and build the capacity of tribes and underserved communities to participate more fully in restoration activities.
- Improvements to West Coast salmon and steelhead populations through habitat restoration and protection activities. Projects selected through this opportunity will protect, conserve, and restore habitat for Pacific salmon and steelhead populations in Alaska, Washington, Oregon, Idaho, Nevada, and California.

NOAA NOS awarded additional funding for future projects, including approximately:
- $575 million for the Climate Resilience Regional Challenge to support collaborative approaches at regional scales to increase resilience of coastal communities.
- $189 million in partnership with the National Fish and Wildlife Foundation through the National Coastal Resilience Fund to strengthen natural infrastructure.
- $123 million to support coastal habitat restoration and conservation in partnership with state-run coastal zone management programs and national estuarine research reserves.
- $23 million in funding for marine debris removal and interception projects.

NOAA NOS supported critical emergency response efforts following national disasters. After the Francis Scott Key Bridge collapsed on the Patapsco River on March 26, 2024, the shipping channel into the Port of Baltimore was closed. NOS conducted efforts to detect debris, measure water depth, collect aerial imagery, and operate the Chesapeake Bay PORTS®. These actions allowed for the establishment of auxiliary navigation channels around the wreckage and aided efforts to remove debris and hazardous materials. Following the Maui wildfires in December 2023, NOS supported the U.S. Coast Guard's (USCG) efforts to remove 87 fire-damaged vessels and associated debris from Lahaina Harbor. NOAA's scientific guidance assisted USCG in safely recovering over 10,000 gallons of petroleum products and 24,000 pounds of hazardous waste.

NOS released a variety of tools to support coastal decision-makers who need to address coastal inundation at climate timescales, including:

- The Coastal Ocean Reanalysis datasets for the Gulf of Mexico and East Coast modeled historical water levels and wave information for locations every 500 meters along the coast. These data will be especially impactful for rural users, who have historically been unserved by NOAA's data.
- A beta Sea Level Calculator to enable users to show how the sea level is changing over time in their location and how the frequency of flooding has changed and will continue to change in the future.
- Monthly high tide outlooks at 64 locations across seven regions to provide an estimate for each day of the likelihood that those locations will experience high tide flooding.
- The NOAA Sea Grant office kicked off Coastal Inundation Community of Practice, a national network of practitioners facilitating peer-to-peer learning, information exchange, and collaborative engagement to advance coastal flooding science, knowledge, and solutions.

NOS and its partners recovered over $39 million through pollution settlements for oil spills and hazardous waste sites. Additionally, in support of Mission Iconic Reefs, a NOAA project which aims to restore nearly three million square feet of the Florida reef tract by 2040, NOS and partners developed a model to predict locations conducive to the survival of nursery-reared Elkhorn coral, which is listed as threatened by the U.S. Fish and Wildlife Service.

Information reported in 2024 (Sea Grant By the Numbers) showed that NOAA's federal investment of $94 million through its Sea Grant programs supported a sustainable coastal economy and environment by generating $828.3 million in coastal economic benefits, including:
- Created or supported 1,479 businesses and 22,251 jobs.
- Published 311 peer-reviewed journal articles.
- 7,736 resource managers used Sea Grant's ecosystem-based approaches to management.
- 49,228 seafood industry personnel adopted responsible fishery practices.
- Restored or protected 15,971,268 acres of coastal habitat.
- Provided training for 2,146 seafood Hazard Analysis Critical Control Points safety certifications.

In FY 2024, EDA incorporated climate considerations aimed at strengthening coastal resilience into its economic development strategies. For its grant portfolio, EDA provided revised Comprehensive Economic Development Strategy (CEDS) Content Guidelines that included sections on climate resilience, environmental sustainability, and climate. Also, EDA's environmentally sustainable development investment priority ensured that climate considerations are incorporated into new grants. In accordance with FY 2024 appropriation language, EDA is also working to support over $5 million in projects to revitalize, expand, and upgrade the physical infrastructure of working waterfronts to attract new industry, encourage business expansion, diversify local economies, and generate or retain long-term private sector jobs and investment. External to these efforts, EDA made grants supporting resilience and environmental sustainability in FY 2024 in areas including, but not restricted to, coastal areas.

Performance Indicator Results

Class	Operating Unit	Performance Indicator	FY 2020 Actual	FY 2021 Actual	FY 2022 Actual	FY 2023 Actual	FY 2024 Actual	FY 2024 Target	FY 2024 Status
Current/ Recurring	NOAA	APG: By September 30, 2025, NOAA will improve climate resilience in coastal communities by completing 100% of programmatic milestones: to improve fish passage for threatened and endangered species; support coastal habitat restoration priorities of tribes and underserved communities, remove marine debris; and protect and conserve coastal and Great Lakes habitats.	—	—	—	—	64%	80%	Not Met*
Current/ Recurring	NOAA	Percentage of U.S. coastal states and territories demonstrating annual improvement in resilience capacity to weather and climate hazards	83%	94%	97%	100%	100%	94%	Exceeded
Current/ Recurring	NOAA	Number of Sea Grant tools, technologies and information services that are used by our partners/customers to improve ecosystem-based management	192	172	200	200	354	200	Exceeded
Current/ Recurring	NOAA	Number of communities that utilize Digital Coast	6,608	6,766	7,634	7,012	7,698	6,500	Exceeded

*This KPI is a key indicator to track progress towards the Agency Priority Goal (APG): Advance toward climate ready coasts. This KPI is on track to be completed by FY 2025, at the end of the APG period. For more information on this goal's progress, refer to the FY 2024-2026 Agency Priority Goals section of this report.

Strategic Conclusions

American coastal communities face increased challenges for coastal resilience. Due to rising relative sea levels, the frequency of high tide flooding in communities has more than doubled since 2000. The frequency of flooding is not just increasing, it is accelerating. NOAA will work to help communities prepare for future coastal flooding by collaborating internally and with Federal and non-Federal partners to implement a Coastal Inundation Capability Framework.

Corals and other sensitive coastal areas are affected by stressors with regional- to global-scale impacts, including marine heat events, disease, and invasive species, as well as from acute incidents such as storms, spills, and marine debris. NOAA will manage networks of protected areas, as well as increase U.S. ability to respond to incidents such as spills and debris.

NOAA is making a historic impact to restore coastal habitats and support communities across the country through the BIL and IRA. Every year, millions of fish migrate to their spawning and rearing habitats to reproduce. Some fish need to swim thousands of miles through oceans and rivers to reach their destinations. They are often blocked from completing their journey by barriers like dams and culverts. When fish can't reach their habitat, they can't reproduce and maintain or grow their populations. As a result, many fish populations have declined. NOAA works to reopen these migratory pathways, restoring access to healthy habitat for fish. These efforts also provide community and economic benefits, like increased opportunities for fishing and boating and reduced risk of flooding. Communities, businesses, and infrastructure in coastal areas are under increasing pressure from the impacts of flooding, climate change, and sea level rise. Habitat restoration provides a safe, effective, and affordable approach to coastal protection. Efforts like restoring coastal wetlands and reopening rivers to migration help strengthen the resilience of coastal communities and ecosystems while also supporting our nation's fisheries and protected species. Capacity building and on-the-ground restoration activities in tribal and underserved communities help to ensure their needs and priorities are at the center of habitat restoration efforts in their communities.

STRATEGIC OBJECTIVE 3.3 – Accelerate development and deployment of clean technologies

Lead Operating Unit: ITA
Contributing Operating Units: EDA, NIST, NOAA

Key Strategies:
- Increase clean technology exports
- Support offshore, renewable energy while protecting vulnerable marine species and maintaining the economic value of fisheries
- Advance cutting-edge technologies aimed at climate mitigation, adaptation, and resilience

Executive Summary of Progress

International Trade Administration (ITA)
In FY 2024, ITA facilitated over $4 billion in climate and clean tech exports through export promotion and commercial diplomacy for American companies. ITA organized and participated in events such as the U.S.-European Union (EU) Solar Manufacturing Supply Chain Forum with over 100 American and EU stakeholders to strengthen the U.S. and EU solar photovoltaic sectors. ITA also supported the development and deployment of clean technologies in the Indo-Pacific region through the Indo-Pacific Economic Framework (IPEF) Clean Economy Agreement. In June 2024, ITA worked closely with the Singapore Ministry of Trade and Industry on the organization of the Investor Forum, which convened the region's largest investors, innovative cleantech startup entrepreneurs, and cutting-edge project proponents with IPEF Ministers and other government officials for matchmaking and investment facilitation. For the implementation of the Clean Economy Agreement, ITA led multiple workstreams that promoted cleantech through the eight Cooperative Work Programs (CWPs), such as the CWP for small modular reactors, and the first workstream of the CWP on hydrogen supply chains. ITA led a Clean EDGE (Enhancing Development and Growth through Clean Energy) and Environmental Technologies Business Development Mission to India to increase U.S. climate solutions exports to foreign markets and deepen the ties between U.S. and Indian clean energy and environmental technology companies. ITA leadership also participated in the fifth Ministerial of the Partnership for Transatlantic Energy and Climate Cooperation (P-TECC) and co-led panel discussions at P-TECC's Business Forum to catalyze investment and cooperation in the development of clean energy. In September 2024, ITA brought 28 American civil nuclear organizations on its annual U.S. Industry Program to the International Atomic Energy Agency General Conference in Vienna, Austria, where they met with 12 foreign delegations to help export U.S. civil nuclear products and services. ITA also led a major Trade Events Partnership Program at the RE+ renewable energy trade show in California, bringing over 700 international delegates to the conference including a reverse trade mission of key stakeholders from the Southern Cone region of South America for a clean tech study tour on the margins of the show.

ITA's Clean Tech Strategic Projects Fund implemented six projects to enhance the capacity of developing country trade partners to deploy clean energy, including technologies and solutions offered by American companies. The projects engaged stakeholders from nine countries in Africa, the Indo-Pacific, and Latin America on topics such as industrial decarbonization, smart grid, electric vehicle battery manufacturing, and methane abatement. ITA also

advocated for high-quality building codes in Pakistan to ensure more climate-resilient built environments, thus facilitating over $68 million in U.S. building product exports. ITA provided economies with a better understanding of existing technologies and supported future regulatory cooperation efforts through its publication in partnership with the Asia-Pacific Economic Cooperation Secretariat of a report sponsored by the United States and led by the Office of Standards and Intellectual Property, entitled An Overview of Green House Gas Monitoring: Objectives and Technologies. ITA also published the Environmental Technologies Top Export Market Rankings as a tool for American industry and Envirotech exporters to explore markets that hold the most opportunity for export success.

Economic Development Administration (EDA)
In October 2023, EDA selected 31 consortia from a competitive pool of 197 applicants to be designated as Technology Hubs. These Designees were chosen based on their potential to become globally competitive in the technologies and industries of the future. Several Designees focus on cutting-edge technologies related to climate mitigation, adaptation, and resilience. For instance, the South Florida Climate Resilience Tech Hub, led by Miami-Dade County, aims to drive innovation in Sustainable and Resilient Infrastructure. Their efforts involve work to develop, commercialize, and scale technologies specifically designed for climate adaptation and mitigation. Another Designee, the Sustainable Polymers Tech Hub, led by the Greater Akron Chamber, is working to address the climate and environmental impact of fossil fuel-derived polymers such as rubbers and plastics. Their goal is to accelerate sustainable polymer manufacturing and commercialization within the United States. EDA also invested $6.7 million in six projects that support or produce products or processes that address the climate crisis by reducing environmental impacts while advancing EDA's mission.

National Institute of Standards and Technology (NIST)
In FY 2024, NIST upgraded a highly precise technology designed to monitor emissions of methane, a critical greenhouse gas, and other trace gases, even in harsh field conditions. Improvements to measure methane emissions and pinpoint their source is an important step to reduce them. NIST's upgraded emissions-monitoring technology allowed the research team to estimate methane emissions in a roughly 855 square kilometer (330 square mile) area of Northern Colorado for two months. The study, which examined emissions from two primary sources (i.e., agriculture and oil and gas production) showed methane emissions from concentrated animal feeding operations (CAFOs) were greater than predicted and that total emissions from oil and gas production in the study area appear to have plateaued over the last several years, despite rising production.

NIST scientists developed a high-precision testing apparatus to benchmark the performance of the materials, called sorbents, used in direct air capture (DAC) plants to trap and remove carbon from the air. The apparatus will enable the agency to develop research-grade test material (RGTM) sorbents for the DAC industry. These reference materials will be tested in the apparatus and validated to remove a certain amount of CO_2 from a given amount of air.

NIST entered into a cooperative agreement with the University of Vermont to establish a Climate Measurements Center of Excellence. The center will bring local climate researchers together to share resources and ideas and will serve as a hub for stakeholders, including government climate offices, universities, nonprofits, industry, and NIST. The center will also support the development of national standards and measurements for tracking hazards and risks associated with climate impacts.

Scientists at NIST developed a new laser-based technique that enhances the analysis of various materials and gases, including greenhouse gases. In their study, the researchers demonstrated that their laboratory-based system could detect methane, a potent greenhouse gas, with 22 times higher

sensitivity than traditional methods. This advancement in sensitivity could one day help identify small leaks or emissions that might otherwise go undetected.

National Oceanic and Atmospheric Administration (NOAA)

NOAA and the Bureau of Ocean Energy Management (BOEM) released a final joint strategy to promote and protect the endangered North Atlantic right whales while responsibly developing offshore wind energy. The strategy identified the agencies' goals and key actions to evaluate and mitigate the potential effects of offshore wind energy development on North Atlantic right whales and their habitat. This effort builds on existing mitigation measures to protect North Atlantic right whales from the potential impacts of offshore wind development. NOAA and BOEM incorporated the best available scientific information and tribal and public feedback in the strategy. The draft strategy will support the Administration's goal of developing 30 gigawatts of offshore wind by 2030.

In FY 2024, NOAA worked to improve methods to monitor marine life and habitat in places where large vessels and aircraft can't operate. NOAA led a team of researchers that sent an uncrewed submarine-shaped vehicle packed with scientific equipment electronics into offshore wind farm areas off southern New England. The vehicle traveled more than 3,000 miles, recorded the tidal cycles, and surveyed at six to 10 knots within 20 meters of turbine structures. This work is crucial to maintaining data streams that are fundamental to effectively managing marine resources for food and conservation. These trials are a step to implement the survey mitigation strategy developed by NOAA and BOEM.

NOAA National Ocean Service (NOS) mapping products advanced the president's clean energy goal to deploy 30 gigawatts of offshore wind energy by 2030, while minimizing the wind industry's impacts on other ocean uses and the environment. In partnership with BOEM, NOAA developed a spatial suitability model that informed BOEM's designation of four wind energy areas in the Gulf of Mexico. The areas have the potential to produce enough renewable energy to power more than six million homes. NOS also worked with wind farms to find solutions that enable the wind farms to operate while mitigating impacts to national high-frequency radar observing systems that inform search-and-rescue missions, oil spill response, and marine navigation.

Performance Indicator Results

Class	Operating Unit	Performance Indicator	FY 2020 Actual	FY 2021 Actual	FY 2022 Actual	FY 2023 Actual	FY 2024 Actual	FY 2024 Target	FY 2024 Status
Current/ Recurring	ITA	Value of Clean Tech Written Impact Narrative Statements	—	—	$2.70 B	$13.80 B	$4.20 B	$1.11 B	Exceeded

Strategic Conclusions

As clean technology needs and international standards evolve in the clean energy transition, the Department will coordinate with other Federal agencies, and other international partners, to further advance clean technology deployment. ITA anticipates ongoing collaboration in the development of clean technology events and ensure resources are properly aligned to support this strategic objective.

STRATEGIC OBJECTIVE 3.4 – Embed climate considerations across Department programs

Lead Operating Unit: Office of the Secretary
Contributing Operating Units: All Operating Units

Key Strategies:
- Incorporate climate considerations into grant-making, stakeholder engagement, and internal processes
- Produce climate-related statistics and research that examine the links between climate and the economy

Executive Summary of Progress

The Department made great progress towards fulfilling S.O. 3.4 in FY 2024, including:
- Published several key papers and research presentations by the Bureau of Economic Analysis (BEA) that provide experimental estimates and methodology for developing an environmental goods and services satellite account, measures of the value of land in the United States, and the physical and monetary flows of energy in the economy.
- Initiated a FY 2024 update, led by the Bureau of Information Security (BIS), based on recent developments and technology advancements, following the FY 2023 Critical Technology Assessment: Impact of U.S. Export Controls on Green Technology Items report. Preliminary results indicate export controls do not impair the export of green technologies.
- Conducted high quality research on climate risk, vulnerability and natural disaster impacts, and to further product development for public facing Census Bureau data tools.
- Invested close to $70 million in 41 projects by the Economic Development Administration (EDA) that were consistent with the agency's investment priority on environmentally sustainable development. These were planning or implementation projects that help address the climate crisis including through the development and implementation of green products, green processes including green infrastructure, green buildings, and green places, including an emphasis on density in the vicinity of the development. This includes over $24 million in 13 projects that are, according to recipient estimates, expected to create or retain approximately 12,250 jobs and attract close to $3.5 billion in private investment. The EDA also invested over $45.6 million in 28 projects to support planning, research, technical assistance, access to capital, or other activities that are essential for successful economic development and job creation in the future.
- Incorporated climate considerations into four high-profile EDA Notice of Funding Opportunities (NOFOs) throughout FY 2024.
- Logged Written Impact Narratives (WINs) by ITA, demonstrating support for American company involvement in approximately $4.2 billion in climate and clean tech projects in foreign markets in FY 2024.
- Assisted 210 unique investment clients in clean tech industries in FY 2024 through SelectUSA and supported 22 clean tech investment WINs totaling approximately $7.5 billion, which support approximately 9,110 American jobs.

- Awarded two Capital Readiness Program (CRP) grants by the Minority Business Development Agency (MBDA), which directed activities to address climate change and its impacts.
- Served approximately 37 socially and economically disadvantaged entrepreneurs by MBDA's CRP awardees, hosted 33 networking events, facilitated almost 200 pitches, and helped entrepreneurs obtain $628,000 in capital.
- Invested $14.7 million to support extramural and intramural efforts in resilience, plastic pollution, and climate impacts by NIST.
- Delivered the most accurate measurements, data, and standards to industry, academia, as well as Federal and local Governments from NIST on topics ranging from carbon dioxide removal, greenhouse gas monitoring, and measuring energy from the Sun to adaptation, resilience and energy efficiency in buildings.
- Expanded partnerships to provide more accurate climate data and tools and playing a key role in the development of the National Strategy to Advance an Integrated U.S. Greenhouse Gas Measurement, Monitoring, and Information System, by NIST.
- Worked with CHIPs applicants to ensure efficient, effective, and predictable reviews that result in informed and environmentally responsible decisions. CHIPS Research and Development (R&D) Office released three NOFO's and a Notice of Intent (NOI) that strongly encourage applicants to identify approaches to maximizing market advantages including environmental sustainability.
- Released the Equitable Climate Services Action Plan by the National Oceanic and Atmospheric Administration (NOAA). The Action Plan is a NOAA-wide effort covering both the upstream and downstream facets of climate services, from data collection to design to delivery. It highlights ways in which NOAA is already doing this work, commits to actions to deliver equitable climate services in the short-term, and includes longer-term actions to create an enabling environment at NOAA. The Action Plan was informed by a 2023 Request for Information, including 13 regional and sectoral listening sessions, that resulted in over 1,300 ideas shared about the needs and priorities of climate service users.
- Released the *NOAA Administrative Order 216-127: Providing for a Climate-Ready Nation*.
- Provided guidance on climate resiliency requirements for the Initial Proposal submissions to NTIA Eligible Entities under the $42.5 billion Broadband Equity, Access and Deployment (BEAD) Program.
- Developed a Resilience Framework to act as a scaffolding for the Department's cross-cutting resilience efforts and leverage the wide array of resilience expertise found across the operating units, by the Office of Sustainable Energy and Environmental Programs (OSEEP).
- Created an Environmental Justice Scorecard and developed an Environmental Justice Strategy, coordinated by OSEEP, that outlines overarching goals, principles, and practices that the Department can adopt to provide long-term, sustainable benefits for people, communities, and the environment.
- Expedited the examination of more than 800 patent applications so far, with 291 of those applications being issued as patents, by the U.S. Patent and Trademark Office (USPTO) Climate Change Mitigation Pilot Program (CCMPP).
- Added green-tech related terms to USPTO Trademark ID manual and concluded the inaugural cycle of the Trademarks for Humanity awards program to incentivize brand owners committed to improving the environment.

Performance Indicator Results

Class	Operating Unit	Performance Indicator	FY 2020 Actual	FY 2021 Actual	FY 2022 Actual	FY 2023 Actual	FY 2024 Actual	FY 2024 Target	FY 2024 Status
Current/ Recurring	DM	Number of people engaged through climate literacy training and education.	—	—	1,587	1,698	2,518	1,500	Exceeded
Current/ Recurring	EDA	Grants for Environmentally Sustainable Investments	—	—	94	26	23	23	Met

Strategic Conclusions

The Department promotes trade, economic and business development, innovation, entrepreneurship, accurate supply chain information, best practices, standards, and performance metrics that consider climate change, while creating economic growth and ensuring that American businesses remain competitive. The Department also ensures it is positioned to help companies turn the emerging demand for climate-friendly technologies into a competitive advantage for American manufacturers and entrepreneurs. The Department's Climate Department Administrative Order (DAO) assists the Department in developing and implementing Department and operating unit-specific policy and guidance to embed climate considerations to both mission work and internal operations.

STRATEGIC OBJECTIVE 4.1 – Implement evidence-based decision making within the Department of Commerce to increase program and policy impact

Lead Operating Unit: OUSEA
Contributing Operating Units: All Operating Units

Key Strategies:
- Create organizational infrastructure to establish evaluation as a critical agency function and a high-performing internal service
- Identify statistical and administrative data that can be used to assess the impact of Federal interventions and develop refinements to increase the utility of the data

Executive Summary of Progress

In FY 2024, the Department doubled the size of the Evaluation Office staff, adding a Deputy Evaluation Officer (EO). The Chief Data Officer (CDO), Statistical Official (SO), and the EO collaborated to increase program and policy impact across the Department. Additionally, the Evaluation Office conducted an extensive search process for a full-time staff evaluator. The Department worked to make progress on the questions in the Learning Agenda, maintained evaluation capacity, and completed evaluations in the FY 2022-FY 2024 annual evaluation plans.

In FY 2024, the Evaluation Office developed a webpage that consolidates papers and reports that support evidence-building and evaluation activities across the Department. While not all the work can be captured at this time, over two dozen papers and reports are listed. This effort will make evidence centrally organized and accessible to both internal and external stakeholders. In FY 2024, seven operating units (i.e., BEA, Census, NIST, ITA, USPTO, EDA NTIA) published 13 papers which are linked on the evaluation webpage. The Census Bureau contributed nearly half of these papers, detailing the evidence-building process for the 2030 Decennial Census.

In FY 2024, the U.S. Patent and Trademark Office (USPTO) developed new evidence to improve the understanding of women participating in the patent system. Specifically, the Office of the Chief Economist evaluated gender disparities in patent citations. The July 2024 working paper, "Untapped Potential: Investigating Gender Disparities in Patent Citations", tests the relationship between the gender composition of inventor teams and the likelihood that a patent is cited by patent applicants on subsequent patents. This effort builds on prior evidence generated by the following Learning Agenda questions:
- What regional economic conditions influence women's choices to seek and obtain patent protection?
- What approaches can improve the accuracy of attributing gender or other demographic identifiers needed to assess if underserved populations are participating in the intellectual property (IP) (i.e., Patent) system?

In FY 2024, the Economic Development Administration (EDA) commenced two major components of work to answer the following question:

- To what extent have EDA's Revolving Loan Fund (RLF) activities, funded via the Coronavirus Aid, Relief, and Economic Security (CARES) Act, influenced the capacities and outcomes of the regions and businesses they serve?

The first component is an Urban Institute RLF brief that examines the history of the RLF program and highlights key insights from successful grantees. The second component is an evaluation from Argonne National Laboratory focused on RLF's funded via the CARES Act, which account for more than 50% of obligated CARES Act funds appropriated to EDA. In FY 2024, EDA received an initial analysis and early findings from a synthetic control model approach to the RLF program.

In FY 2024, the National Oceanic and Atmospheric Administration (NOAA) and Bureau of Economic Analysis (BEA) developed the preliminary definition of Blue Technology that will enable both agencies to identify major Blue Tech components and develop an extensive dataset of industries and activities. NOAA also published a white paper, "Terminology Related to Ocean and Coastal Economic Activity" to provide consistent terminology related to the description of ocean and coastal economic activity, and the provision of ocean data, information, and knowledge. NOAA is working to develop pilot marine natural accounts which will contribute to the implementation of the U.S. National Strategy to Develop Statistics for Environmental and Economics Decisions.

In FY 2024, the Census Bureau's Center of Excellence (COE) developed partnerships with the Office of the Undersecretary for Economic Affairs, EDA, NOAA, the Minority Business Development Agency (MBDA), and the National Institute of Standards and Technology (NIST) to consolidate data on individuals and businesses who receive federal investments with longitudinal Census Bureau administrative and survey data, for evidence building to support program evaluations. The COE is an interdisciplinary team dedicated to providing services and expertise in support of evidence-building and evaluation at the Census Bureau, across the Department, and across the federal government. On September 25, 2024, the COE received project approval to access a wide array of administrative data, censuses and surveys to conduct this work.

Performance Indicator Results

Class	Operating Unit	Performance Indicator	FY 2020 Actual	FY 2021 Actual	FY 2022 Actual	FY 2023 Actual	FY 2024 Actual	FY 2024 Target	FY 2024 Status
Current/ Recurring	OUSEA	Percent of Annual Evaluation Plan Projects on Track	—	—	92%	82%	87%	80%	Exceeded

Strategic Conclusions

In FY 2024, the Department of Commerce increased its capacity to conduct evidence-building analyses including the study of long-term employment and earnings trajectories for individuals who completed work training programs or of characteristics for businesses who received investments compared to those who did not receive investments. This quasi-experimental approach to evaluation is an efficient means to leverage data and expertise across the

Department of Commerce and the federal government to better understand the effectiveness of program administration and learn how programs impact firms, workers, individuals and communities. The Department worked to increase evidence-building relationships within and outside of the Department. The Department's statistical agencies, BEA and the Census Bureau, and program agencies, such as EDA, MBDA, and NIST, established new and nurtured existing relationships with external organizations that support new and established evidence-building and evaluation work. One key recommendation is for programs to collaborate with the Evaluation Office staff to collect data that will facilitate better record linkage to statistical and administrative data.

STRATEGIC OBJECTIVE 4.2 – Modernize economic and demographic statistics to better meet business, policymaker, and community needs

Lead Operating Unit: Census
Contributing Operating Units: BEA, OUSEA

Key Strategies:
- Expand high-frequency data products in response to government, public, and business data needs
- Modernize data collection and production methods for creating quality data products with minimal respondent burden
- Develop new and expanded products to measure a dynamic economy

Executive Summary of Progress

Decennial Census

In FY 2024, the Census Bureau closed out its activities for the 2020 Census program by providing data to the National Archives and Records Administration and prepared for the 2030 Census. To prepare for the 2030 Census, Census deployed 2030 Census program architecture documentation and conducted detailed program design, research, and plans to:

1. enhance geospatial and demographic frame implementation,
2. enhance data processing and quality measurement, and
3. focus resources to enhance methods for enumerating the nation, including historically undercounted populations and those living in specialized housing situations.

Concurrent comprehensive update of national, state, and industry economic accounts

In FY 2024, the Bureau of Economic Analysis (BEA) produced the first comprehensive update of national, industry, and regional statistics. This effort aims to harmonize new source data across all three accounts to provide a cohesive view of the U.S. economy and its geographic and industry underpinnings. This marked a capstone achievement of BEA's multi-year effort to harmonize the production of statistics across all three dimensions and provide the American people consistent economic information.

Income distribution and well-being

BEA updated statistics on the distribution of personal income with full data for 2020 and provisional estimates for 2021, along with supplemental data for international comparability. BEA also collaborated with BLS to develop prototype statistics of the distribution of personal consumption expenditures for 2017-2020 based on the Consumer Expenditure Survey. Finally, BEA updated its prototype measures of economic well-being and growth.

Improved international and regional statistics

BEA produced statistics based on the results of the 2019 Benchmark Survey of U.S. Direct Investment Abroad, which is BEA's largest survey. For the first time, the survey collected new information vital to measuring the digital economy's role in international investment. BEA expanded data collection to include key aspects of the digital economy, such as sales, employment, and costs related to cloud computing, digital intermediation services, and advertising. Additional questions captured the percentage of sales for remotely delivered services, digitally ordered services, and goods. BEA also introduced a question about collaborative research and development agreements between parent companies and affiliates, which, while not exclusively digital, have relevant connections. BEA also introduced a new methodology using BLS data that improves estimates of state-level employment by American businesses newly acquired by foreign investors. Finally, BEA updated regional price parities to include data for 2021 and revised estimates for 2017 through 2020, incorporating new source data and methodological improvements.

Research to advance economic statistics

BEA developed new experimental statistical products and methodologies to enhance users' understanding of the dynamic economy. These research products included:

- Experimental measures of wages and employment by industry for small, medium, and large businesses
- Two papers that explore methods and techniques to recognize and value data as an asset, a critical first step to measure this asset class, which is currently unaccounted for in the national accounts
- A feasibility study to measure the bioeconomy, as directed by *Executive Order 14081 on Advancing Biotechnology and Biomanufacturing Innovation for a Sustainable, Safe, and Secure American Bioeconomy*

Production and dissemination

BEA and the Census Bureau played key roles in the launch of the Standard Application Process, which provides a single portal and process for researchers to access restricted-use data across the federal statistical system. Additionally, BEA completed the second year of a five-year project to convert production processes into the Python programming language to modernize, streamline, and integrate systems, and to facilitate ongoing adoption of data science techniques. BEA also updated the release schedule for the *Survey of Current Business*, BEA's journal of record, which now releases on a rolling basis to improve timeliness and contains two new content sections, Infographics and Research Spotlights to better highlight BEA statistics and research for all audiences. To make search more accessible to the public, Research Spotlights are short, general-interest pieces that simplify BEA's technical research papers into something digestible for a non-economist audience.

Performance Indicator Results

Class	Operating Unit	Performance Indicator	FY 2020 Actual	FY 2021 Actual	FY 2022 Actual	FY 2023 Actual	FY 2024 Actual	FY 2024 Target	FY 2024 Status
Current/ Recurring	Census	American Community Survey data products released as scheduled	100%	50%	100%	100%	100%	100%	Met
Current/ Recurring	Census	Percentage of key data products for Census Bureau programs released on time to support effective decision-making of policymakers, businesses, and the public	85%	100%	85%	97%	100%	85%	Exceeded
Current/ Recurring	Census	2020/2030 Decennial Census planned operational efficiencies and program milestones met	50%	40%	100%	78%	92%	85%	Exceeded
Current/ Recurring	Census	Number of principal economic indicators released on time	118	120	120	120	120	120	Met
Current/ Recurring	Census	Complete key activities in support of the Economic Census and Census of Governments on time	100%	100%	100%	100%	100%	75%	Exceeded
Current/ Recurring	Census	On-time delivery of data products from the High Frequency Data program that measure the impact of significant events in near-real time	—	—	—	112%	95%	85%	Exceeded
Current/ Recurring	Census	Percentage of milestones met in developing Census information technology (IT) enterprise to enhance collection, processing, and dissemination of data	100%	100%	100%	100%	100%	85%	Met

Strategic Goal 4: Expand Opportunity and Discovery through Data

Strategic Conclusions

In FY 2024, the Department of Commerce made notable progress to modernize economic and demographic statistics to better meet business, policymaker, and community needs. By working together to transform to a data-centric model that blends survey data with administrative and alternative digital data sources, the Department's operating units can address common challenges, as well as provide more timely and relevant data products to stakeholders and the American public.

STRATEGIC OBJECTIVE 4.3 – Improve Commerce data usability and advance ethical, responsible, and equitable data practices

Lead Operating Unit: OUSEA
Contributing Operating Units: All Operating Units

Key Strategies:
- Modernize the data ecosystem
- Develop principles, guidance, and capacity for appropriate data practices at the Department of Commerce
- Leverage partnerships and stakeholder engagements to continuously improve data access and usage
- Strengthen scientific integrity across the Department
- Improve efficiency of data sharing

Executive Summary of Progress

FY 2024-2028 DOC Data Strategy

The FY 2024-2028 Data Strategy provides a comprehensive roadmap for reshaping how the Department manages and shares data, breaks down silos, and creates a cohesive, interoperable data environment. This strategy will focus on five key workstreams—Critical and Emerging Technologies, Place-Based Development, Climate Resilience, AI-Ready Data, and HR Analytics—all designed to align our data resources with the Department's mission-critical goals. Beginning in March 2024, the MITRE group began to gather information and in April 2024 they began to plan initial subject matter experts (SME) interviews on various topics. By the end of FY 2024, over 65 stakeholders and SMEs from across the Department convened to identify the current challenges and brainstorm potential pathways forward. By late summer, the team completed all rounds of SME Interviews and vision sessions and drafted the Department's Data Strategy document.

AI and Open Government Data Assets Working Group

In November 2023, the Department formed the AI and Open Government Data Assets Working Groups (WG). Formal working group formed in November 2023. On April 17, 2024, the WG released a Request for Information (RFI) to gather information about frequently recommended technologies and how Commerce could achieve AI-ready open data assets. In FY 2024, the WG held workshops and convened meetings related to various AI topics. On April 29, they hosted a Public Webinar Q&A. The WG created draft guidelines and best practices to publish AI-ready open government data. Publishing AI-ready data means disseminating data that is not just machine-readable, but machine-understandable; data that is enriched with contextual metadata and organized in interpretable standard formats. The WG worked quickly to develop these guidelines due to the rise of generative AI tools built on mass amounts of public data, including public government data.

Strategic Goal 4: Expand Opportunity and Discovery through Data

Commerce Data Working Group (CDWG)

CDWG developed a draft outline for a recommendations report to address potential challenges and solutions for enterprise-wide acquisition. The draft recommendations report will also outline lessons learned for the working group and how it will be transitioned into the upcoming workstreams. In February 2024, CDWG submitted an RFP for the Commerce Data Hub Pilot Program which will remain open until February 2025.

International Trade Administrations (ITA) Contributions

In FY 2024, ITA produced interactive data tools that help to inform business decisions and policy direction across the U.S. Government. Modernizations to ITA's suite of data include the following:

- ITA introduced its Global Scrap Monitor, a new online tool that allows users to track steel, pig iron, and aluminum scrap trade flows for top exporting and importing countries, including any export restrictions. Scrap and related inputs are critical materials in global metal supply chains and are important to reductions in carbon emissions.
- ITA launched updates to its Aluminum Import Monitor's Country of Smelt Dashboard, a digital resource to track supply chain information on aluminum imports into the United States. These visualization platforms improve industry stakeholder and consumer understanding of supply chains by tracking shifting trade patterns and impacts from policy actions such as possible trade remedies or sanctions.
- ITA developed new data visualization tools to facilitate the use of its travel and tourism statistics and analysis. ITA's Country Profile Monitor visualization tool, for example, includes annual visitation, traveler characteristics, and the economic impact of travel and tourism to the United States, including American jobs supported by travel and tourism exports to 71 countries. ITA also enhanced the International Visitor Arrivals Data visualization tool, which captures data from the Arrival and Departure Information System (ADIS) I-94 form when visitors enter the country.
- ITA developed and launched a new Market Diversification Tool for International Education that helps educational institutions to explore and compare potential markets for their services.
- ITA published new Top Export Market Rankings reports on Environmental Technologies and Travel and Tourism. These resources provide detailed analysis to strengthen the export competitiveness of American industry and support strategies to unlock export and investment opportunities.
- ITA updated its Economic Development Database to help international companies decide on locations for potential investment in the United States, its State-by-State dashboards that display different industry clusters and include links to each state's fact sheet and state incentives database page, and Foreign Direct Investment Fact Sheets that provides current information by state or territory, international market, and industry.
- ITA published 126 Country Commercial Guides—including 71 from its international field offices and 55 by the Department of State in other markets. Country Commercial Guides are comprehensive reports on market conditions and opportunities that are prepared annually by market experts at U.S. Embassies worldwide. ITA improved the organization and presentation of these reports on its trade.gov website.
- ITA's international field offices published 459 Market Intelligence articles. Market Intelligence articles are brief, timely, and actionable reports directed at American exporters that provide information on opportunities and changes in the business or regulatory environment. Additionally, ITA introduced new filters on its trade.gov website so that customers can more easily find these articles.

- ITA updated its Country Commercial Guides to include a separate chapter on the digital economy. ITA published 70 Digital Economy reports that provide information on current trends, opportunities, and challenges impacting the digital economy.

CITRB Data Management Working Group

In May 2024, the Department established the CITRB Data Management Working Group to document policies and procedures that improve IT acquisitions that involve data management, data accessibility via APIs, data interoperability, and the availability of data to the public. The working group outlined a systematic approach to the CITRB checklist to ensure that the needs of various stakeholders are met. In three months, the working group completed deliverables to ensure that all projects subject to the Department level CITRB review were department wide and shared systems with lifecycle costs less than $10 million (i.e., IT systems that will collect/store/process data when operated). This group also created a draft checklist for IT acquisition requirements for acquisitions of the required contractor to generate data in fulfillment of the contract. This checklist included a requirement that contractors provide a data management plan. In September 2024, the CDGB Principals approved these deliverables.

Geospatial Working Group

- NOAA, in partnership with the Department of Interior and the U.S. Global Change Research Program are working to develop a "Climate Resilience Information System (CRIS)". CRIS is designed to streamline public access to federal agencies' decision-relevant data for climate adaptation and resilience planning.
- NOAA supported the development and rollout of the "Federal Climate Mapping for Resilience and Adaptation" application for the White House Council on Environmental Quality.
- NOAA supported a multi-agency effort to establish a data sharing mechanism in response to the Francis Scott Key Bridge collapse.
- The Federal Geographic Data Committee (FGDC) approved and published the new National Spatial Data Infrastructure (NSDI) Strategic Plan for 2025-2035 Building the Geospatial Future Together—The NSDI Strategic Plan 2025–2035.
- Members of the Commerce Geospatial Working Group (CGWG) are working on the Department Covered Agency report.
- Census and NOAA are working to develop the Department's Geospatial Strategy for 2025-2028.
- CGWG engaged with partners throughout the fiscal year at various domestic and international conferences and forums.

Performance Indicator Results

Class	Operating Unit	Performance Indicator	FY 2020 Actual	FY 2021 Actual	FY 2022 Actual	FY 2023 Actual	FY 2024 Actual	FY 2024 Target	FY 2024 Status
Current/ Recurring	OUSEA	Number of Data sets published on Commerce Data Inventory	—	—	—	2,206	50,000	2,000	Exceeded
Current/ Recurring	OUSEA	Percent Data Strategy Action Plan milestones met on time	—	—	77%	80%	100%	70%	Exceeded

Strategic Conclusions

The FY 2024-2028 Data Strategy action plan will help achieve a vision for a shared governance model, where cross-domain standards, policies, data catalogs are managed. To implement the four-year strategy, the CDGB will develop annual action plans with goals and milestones. The annual action plans will be based on strategies that are the most feasible and impactful for operating units to make progress on. The CDGB and its component groups will report on progress at its monthly meetings, as well as Department-wide meetings on a quarterly basis. Data governance frameworks are key to improving the quality, trustworthiness, and interoperability of datasets.

The AI and Open Government Data Assts Working Group is leading the charge to document key guidelines for emerging AI technologies across the Department. This group is working to make enterprise data AI-ready to realize benefits for improving the Department's operations and business objectives, as well as to cultivate a skilled workforce in AI-ready data management. To meet these demands, the working group must move beyond siloed data management and toward an integrated, cross-operating unit approach enriched by AI and other advanced technologies.

The working group plans to create an environment that encourages open lines of communication and knowledge sharing from our CDGB meetings directly back to the operating units via routine meetings, smaller group check-ins, and different formats of communications (e.g., brown bags, blogs, email blast). The success of the CDGB relies on the Department's collaboration with each operating unit and the critical stakeholders essential to accomplish the various workstreams.

STRATEGIC OBJECTIVE 5.1 – Effectively implement new Department of Commerce authorities and investments

Lead Operating Unit: Office of the Secretary
Contributing Operating Units: All Operating Units

Key Strategies:
- Establish and communicate clear performance management protocols for new and expanded financial assistance programs
- Ensure efficient, effective, and transparent use of funds
- Ensure programs serve all relevant stakeholders
- Increase workforce capacity and innovation competencies

Executive Summary of Progress

Office of Acquisition Management (OAM)

The Office of Acquisition Management (OAM) reported a steady increase in the number of its workforce credentialed in innovative acquisition techniques, and the year-to-date figure is 50 versus the actual target of 75 (67%). However, the actual of 50 meets the prior year's target of 50. OAM significantly exceeded its goal for training in innovative acquisition techniques by 164% (actual of 739 versus target of 450). OAM also tracked the training events, continuous learning points, and more for each available course, with the actual of 739 equating to 3,617 hours across 13 courses. OAM conducted an Acquisition and Financial Assistance Conference (i.e., The Big "A" Conference) attended by over 1,000 people from across the Department. The conference highlighted the critical role that procurement, financial assistance, risk, and program management play in executing the Department's mission and included professional development sessions focused on above base initiatives, President's Management Agenda Priority Area 3 Initiatives and Successes, IT Modernization, and other training topics related to the day-to-day work of the acquisition workforce. OAM enhanced the Acquisition Cross Training Program (ACTP), a developmental assignment program in which acquisition professionals in contracting, program management, and financial management exchange roles for 60-90 days to perform the acquisition functions of their counterparts. The program's objective is for participants to acquire new knowledge, skills, and abilities relative to the acquisition field and a broader perspective of the contribution of acquisition towards mission fulfillment. Participation in the ACTP in FY 2024 brings the total number of graduates to six since the program was initiated in FY 2022. OAM conducted a Department Program/Project manager (PPM) competency and skills analysis to assess the health and capacity of the Department's PPM workforce and to inform workforce development strategies. OAM held a Contracting Officer Representative (COR) Excellence Awards program recognizing outstanding performance in Contract Formation, Contract Administration, and COR Workforce Development.

Office of Financial Management (OFM)

In FY 2024, the Department conducted its annual OMB Circular A-123 evaluation over the following business processes: grants, personal property, plant and equipment, purchasing, payroll and benefits, revenue, and financial reporting. The Department uses a risk-based approach to identify high-risk

areas and focus its annual testing efforts. Although no material instances of ineffective material misstatements were noted during the annual testing, the overall FY 2024 results identified a material weakness in financial reporting controls at NOAA related to the implementation of the new financial system. The new financial system, when fully implemented, will provide program managers with additional data to analyze and more effectively manage their programs and make data-driven decisions. The Department implemented a Governance, Regulatory, and Compliance (GRC) cloud-based platform to facilitate the annual OMB A-123 assessment. The platform consolidates the assessment results input by the operating units and allows the Department to have real time data on the effectiveness of controls based on the operating unit's testing results. The Department developed data analytic tests and dashboards to assist in identifying irregularities in travel, purchase card, and time and attendance. The identification of these issues has led to certain operating units' implementation of regular monitoring and other preventive and detective internal controls to ensure the issues don't arise again. Strengthening the Department's internal controls will ensure more effective and efficient use of funds.

International Trade Administration (ITA)
ITA received sufficient resources to support its mission and fully obligated its FY 2024 appropriations. ITA met or exceeded all budget submission, financial reporting, and financial statement audit deadlines to internal and external stakeholders; successfully complied with government-wide requirements; and ended the fiscal year without any audit deficiencies or weaknesses. Through its Lean Agile Management Program (LAMP), ITA enhanced accountability, collaboration, predictability, and transparency for mission product delivery. This program achieved 17 minimum viable products and delivered five product launches. These successes positioned ITA to retire Lotus Notes and eMenu, thus realizing an eight-year effort to resolve a critical business need, reduce $2 million in technical debt, and mark a major milestone for compliance with the Modernizing Government Technology Act. LAMP launched product enhancements in the Steel Import Monitoring and Analysis (SIMA) system, Textiles and Apparel Made in USA program, Earned Import Allowance Program (EIAP), and Commercial Availability. These enhancements automate email messages in SIMA, resulting in 2,000 working hours of staff time saved per year; facilitate business-to-business matchmaking for the textile, apparel industries, footwear, and travel good industries to streamline processing of requests to deposit credits and generate import approval certificates under the EIAP; manage commercial availability (short supply) filings under the Dominican Republic-Central America, Colombia, Panama, and Peru Free Trade Agreements; and provide relevant information to the public through the Textiles and Apparel website.

ITA's Management Operations Division plays a key role in facilitating agreements for grants management services for financial assistance programs, such as the Market Development Cooperator Program (MDCP) and the U.S. Foreign Commercial Service (USFCS) Fellowship Program. ITA's financial assistance programs are co-managed by the National Oceanic and Atmospheric Administration (NOAA), which transitioned to the electronic Research Administration system for online grants management. ITA also uses the National Institute of Standards and Technology's (NIST) Grants Management Information System. ITA reached separate agreements with NIST and NOAA to collaborate on grants management support and guidance to program officers, recipients, and others.

Performance Indicator Results

Class	Operating Unit	Performance Indicator	FY 2020 Actual	FY 2021 Actual	FY 2022 Actual	FY 2023 Actual	FY 2024 Actual	FY 2024 Target	FY 2024 Status
Current/ Recurring	DM	Number of repeat significant deficiencies and/or material weaknesses remaining within one year of determination	1	1	0	0	0	0	Not Met
Current/ Recurring	DM	Number of workforce trained in innovative acquisition techniques	—	—	430	538	739	450	Exceeded
Current/ Recurring	DM	Audit Opinion Score	1	1	1	1	1	1	Met
Current/ Recurring	DM	Number of workforce credentialed in innovative acquisition techniques	—	—	43	275	50	75	Not Met

Strategic Conclusions

In FY 2024, The Department made notable progress to effectively implement new Department of Commerce authorities and investments. OAM made significant progress in workforce development and training, exceeding its goals in innovative acquisition techniques while enhancing cross-training programs and hosting a highly attended departmental conference. These efforts underscore OAM's role in strengthening procurement, financial assistance, and program management practices. OAM plans to maintain its effort to build the acquisition capacity of the Department's workforce. OFM focused on efforts to enhance internal controls and risk management processes, implement a cloud-based governance platform and data analytic tools to ensure more robust oversight and effective use of funds. Through LAMP, ITA implemented critical technological upgrades that saved thousands of staff hours and enhanced the delivery of ITA's services.

Collectively, OAM, OFM, and ITA's accomplishments highlight the Department's dedication to fostering innovation, accountability, and cross-functional collaboration, ensuring readiness to address evolving challenges to effectively implement new Department of Commerce authorities and investments.

STRATEGIC OBJECTIVE 5.2 – Optimize workforce and diversity, equity, and inclusion practices

Lead Operating Unit: Office of the Secretary
Contributing Operating Units: All Operating Units

Key Strategies:
- Attract, recruit, hire, and retain talented and diverse employees
- Improve hiring processes and pipelines to reduce hiring time and vacancy backlogs
- Make the Department's work environment more accessible, inclusive, and engaging
- Build a pipeline to develop minority managers and senior executives so Department leadership reflects the diverse Nation it serves
- Develop and grow current Federal employee skill sets to adapt to changing priorities and support upward career mobility
- Create more workforce agility, flexibility, and capabilities to accommodate expanded mission areas and the future of work

Executive Summary of Progress

Enhanced efforts to attract, recruit, hire, and retain talented and diverse employees
The Office of Human Resources Management (OHRM) released the first ever Department Talent Strategy, 2024-2026, outlining five goals and 10 supporting objectives intended to optimize efforts to recruit talent and enable meaningful, multi-part Department careers involving different roles. OHRM enhanced the Department's Careers LinkedIn page, securing more than 4,000 followers and receiving over 250,000 impressions for published content promoted to high potential talent. OHRM revised policies for early career opportunities to expand eligibility, streamline hiring, and increase pay flexibility. OHRM published a comprehensive calendar of recruiting events to better connect with prospective talent and ensure shared understanding among internal outreach stakeholders. The Talent Management Office (TMO) supported 800+ recruitments, hiring over 400 employees from January 1, 2024, through September 30, 2024.

In September 2024, the Office of Civil Rights (OCR) launched the second Employee Retention Survey (ERS), which is the Department's third barrier analysis. This Department wide project builds upon the outcomes of the 2019 ERS and was conducted by Census' Center for Behavioral Science Methods (CBSM). This initiative included focus groups interviews which were conducted in the Fall and Winter of 2023. Insights from these interviews informed the development of the questionnaire used in the ERS. The goal of the initiative is to understand the experiences of the Department's employees, specifically the factors influencing their decisions to leave or stay. The insights gained from the survey will help the Department improve the work environment, address employee turnover, and develop effective recruitment, retention, and advancement strategies.

The Census Bureau held a data science symposium with Bowie State University; hosted an enterprise-wide recruitment fair in December 2023, which resulted in three successful selections; increased partnerships targeting underserved communities by 73%; and explored additional colleges and universities targeting historically underserved communities for potential consortium partnership engagement; and attended 14 minority servicing institutions' recruitment events to include one at Gallaudet University.

The National Institute of Standards and Technology (NIST) Strategic Recruitment Program (SRP) participated in 29 recruitment and outreach events during FY 2024. Of these 29 events, 22 were diversity focused. They included 10 diversity organizations and 12 Minority Service Institutes. NIST SRP engaged with over 1,400 candidates at these events; and directed all to apply for a full-time position or internship opportunity. NIST SRP participated and created 6 new partnerships with universities, colleges, and professional organizations.

The International Trade Administration (ITA) filled 200 vacancies and achieved a 96 percent fill rate against Congressionally approved staffing targets. ITA implemented its second Succession Planning Cohort to enhance employee leadership skills based on mission-critical competencies. The program maintains high satisfaction rates among graduates. ITA also developed an Alumni Network focused on long-term engagement to reinforce lessons learned from the cohort. ITA executed the first organization-wide Mentoring Pilot program based on key findings from a recent organizational development learning needs assessment. The pilot's objectives include facilitating knowledge sharing of mentors and mentees, expanding professional networks, and supporting professional development. ITA marked the third anniversary of its Diversity and Inclusion Advisory Council (DIAC), which aims to nurture a workplace culture that advances diversity, equity, inclusion, and accessibility (DEIA). The DIAC produced a DEIA Calendar that highlights religious observances, cultural heritage months, wellness webinars, and other notable dates and events.

Improved hiring process and pipelines by reducing hiring time and vacancy backlogs
The TMO improved its time-to-hire by nine days, specifically by comparing the Q1 FY 2024 time of 116 days to the Q4 FY 2024 time of 107 days, bringing services one step closer to meeting OPM's 80-Day time to hire based on time to recruit through entry-on-duty date. Overall, FY 2024 achieved a remarkable improvement in time-to-hire, reducing it by 13.5 days - from an average of 124.5 days in FY 2023 to 111 days in FY 2024. The TMO integrated the Office of Security's background investigation processes into the USA Staffing recruitment platform, resulting in a reduced need to download documents containing PII and increased transparency into the status of actions throughout the security process. This enhancement led to an average 4-day decrease in the time to hire. The TMO improved functionality and user experience through the Power Recruit redesign, streamlining recruitment requests in HRConnect (HRC) and aligning them to corresponding fields within the USA Staffing recruitment system. The TMO implemented the New Hire Interconnection, integrating three systems, USA Staffing, HRConnect, and eOPF to streamline manual processes through an automated transfer of new hire information and forms. The TMO designed and built an Applicant Tracking and Lifestyle Analysis Solution (ATLAS), a custom talent management ServiceNow application. ATLAS is fully integrated with USA Staffing and decreases reliance on manual tracking and reporting.

OCR collaborated with OHRM's Executive Resources to build a dashboard that displays in real time demographic data relating to the Department's Senior Executive Service (SES) workforce. This dashboard will help monitor changes in the composition of the SES and to aid in workforce planning.

The Census Bureau conducted comprehensive research on industry best practices to improve and enhance the HR business model for consideration and implementation; efforts included identifying a total solution to track actions through the hiring process that would result in the development of an integrated Talent Acquisition Tracking System. Additionally, the Census Bureau established a paperless onboarding process for its regional offices' competitive services, reducing the reliance on physical documents.

NIST completed a cross-functional team project led by process engineers to improve the hiring process, resulting in a decrease in the average time to hire by 28 days. NIST Established regular open house meetings with the Office of Security to improve communication and coordination on pre-

appointment security tasks. NIST requested organizational hiring plans for the coming year to determine HR Specialist assignments and identify planned surge areas to determine internal plans to manage workload fluctuation. NIST developed communication plans for HR Specialists to engage with hiring managers, highlighting various touchpoints in the process to proactively communicate and advise on various steps in the process.

Made the Department's work environment more accessible, inclusive, and engaging
In FY 2024, the Department made progress to advance DEIA in a timely and effective manner. Of the 190 actions outlined in the Department's FY 2022-2024 DEIA Strategic Plan, 130 actions (68%) were either completed or on track for FY 2024. Some key highlights included:

- Updated DEIA Performance Language: Revised DEIA performance language for nearly 50,000 employees, including 1,200 supervisors, to promote accountability and ownership of workplace culture.
- Launched Safe and Inclusive Workplace Campaign: Partnered with offices under the Office of the Chief Financial Officer and Assistant Secretary for Administration to host lunch-and-learn sessions on psychological and physical safety, attracting close to 1,500 participants across the first six events.
- Inclusive Leadership Training: Sponsored the rollout of Inclusive Leadership training, with 110 leaders across the Department completing the program.
- Issued Equitable Policy Guidance: Published resources such as the *Gender Inclusive Language Promising Practices Guide* and the *Bulletin on Gender Identity and Gender Expression Protections* on the OCR website. Additionally, released new posters to educate employees on religious discrimination, supporting the Department's Strategy on Combating Anti-Semitism and Islamophobia.
- Built Inclusive Spaces: Introduced gender-neutral restrooms at the Hebert Clark Hoover Building (HCHB), permanently displayed the first PRIDE flag, and named the Mineta Auditorium to celebrate inclusivity.

OCR and OHRM to conducted Reasonable Accommodations and Performance Management training. This workshop, presented by the Department's experts, focused on the reasonable accommodation process, how it applies to performance management, and the Supervisor's role and responsibilities for both programs. This includes addressing poor performance and conduct related matters as they relate to employees with disabilities seeking reasonable accommodation. Supervisors had the opportunity to ask questions, receive guidance from experts, and engage in facilitated scenario-based discussions. The goal of the training was to educate the Department's supervisors and managers so they can make timely and informed decisions when handling performance and reasonable accommodations matters.

OCR partnered with the HCHB Differing Abilities (DA ERG) to host a panel discussion on the "Intersectionality of Artificial Intelligence and Neurodiversity". The growing popularity of Artificial Intelligence (AI) has opened new doors that enhance work capabilities and performance for people with disabilities. In recognition of National Disability Employment Awareness Month, this event featured Commerce experts in the field of AI and neurodiversity. It was the first in a series of panel discussions regarding the impact of AI and DEIA planned for the Department.

OCR participated in the ITA's Diversity and Inclusion Advisory Council (DIAC) sponsored panel discussion on **"***Differing Abilities: Access for Everyone"***.** The focus of this webinar was global accessibility for employees and job applicants with disabilities. Discussion topics included reasonable accommodation -- what it is, how to access it, and what benefit it brings to those using it; responsible recruiting for people with disabilities interested in making a career with Department.

CHIPS for America, in partnership with the U.S. Department of Labor's Office of Disability Employment Policy and The Good Jobs Initiative hosted "*CHIPS for America: Creating Inclusive Opportunities for Individuals with Disabilities, A Good Jobs Initiative*" webinar for organizations that serve, support, or work with the disability community. This webinar served as a CHIPS for America program primer and focused on CHIPS workforce development requirements and policies and strategies related to scaling the American semiconductor industry. Participants include CHIPS for America policy specialists, U.S. Department of Labor experts, and disability community.

The Office of Faith-Based and Neighborhood Partnership (OFBNP) collaborated with OCR, other Federal agencies and private organizations to host the 2024 National Disability Leadership Summit in Washington, DC. The purpose of this hybrid (in-person and livestreamed), White House co-sponsored event, was to amplify and promote disability and neurodivergent inclusive development, to empower and include Americans with disabilities. The summit provided resources and opportunities for connections between the disability community and key stakeholders, to stimulate improvements to policies, funding, education, and representation for people with disabilities.

OCR sponsored or co-sponsored 21 programs designed to educate the Department's employees, instill a sense of belonging, celebrate equal employment opportunity (EEO) groups' contributions to the Nation and the Department's mission; and promote diversity (e.g., cultural awareness), equity, accessibility and EEO principles. One key highlight for FY 2024 was the launch of the Safe and Inclusive Workplace Campaign which aligned with the strategies outlined in the Department's FY 2022-2024 DEIA Strategic Plan. The campaign featured six lunch-and-learn sessions, covering topics such as sexual assault prevention and response, mental health awareness, and workplace safety. These sessions reached over 1500 employees, between April and September of 2024. The aim of the campaign was to engage the Department's workforce using a holistic approach to foster a safe and inclusive work environment.

The Census Bureau advanced efforts to create a more accessible, inclusive, and engaging work environment by developing enterprise-wide guidance on managing and working in a hybrid setting and successfully finalized, published, and implemented the remote work policy through collaborative efforts between the Census Director and AFGE President Council 241.

NIST collaborated with staff, facilities, and interest groups to promote electronic and physical accessibility tools and resources, providing electronic scooters for temporary use. NIST conducted a series of Town Hall meetings with new executives to share their personal experiences with employees and share their future visions for respective offices.

Built a pipeline to develop minority managers and senior executives so Department leadership reflects the diverse Nation it serves
The Census Bureau's partnerships with Bowie State University and the University of Texas San Antonio are an active strategy for addressing the lack of diversity in STEM and creating interest in federal employment with the Census Bureau. Additionally, the succession planning team has begun data-driven consulting sessions with Senior Executive Service (SES) leaders to identify and diversify the talent pool, creating a safe space for meaningful dialogue and ensuring we identify the best internal and external talent to inform SES recruiting decisions.

In FY 2024, NIST revised performance plans guidance for SES members requiring the following two performance requirements: 1) Employees are coached to realize their potential and employee performance is managed through development of performance plans, continuous feedback on performance, performance appraisals, and resolution of performance deficiencies. Recognition programs (i.e., monetary, non-monetary, or honor

awards) are routinely utilized to acknowledge employee performance. Employees are advised of the availability of developmental opportunities at a minimum, annually; and 2) choose a mandatory DEIA statement from a list of DEIA-related goals provided by the Department. In the FY 2024 performance plan guidance, Senior-Level (SL) and Scientific and Professional (ST) members were required to include the competencies of Leveraging Diversity/Civil Rights Compliance and Mentorship in the critical element Interpersonal Leadership/Responsibilities. NIST established Supervisory Learning Series (SLS) which became one of the top-rated training series. The topics were determined by NIST clients, ensuring that pertinent areas were addressed. Additionally, the Learning and Organizational Development Division (LODD) added Performance Management, Strategic Conversations, Pay and Leave, and Building and Developing Teams. Video recordings are now available 24/7 in the Commerce Learning Center (CLC).

Developed and grew current Federal employee skill sets to adapt to changing priorities and support upward career mobility
OHRM designed and launched the initial cohort of 50 employees for the Secretary's Leadership Seminar in partnership with the Harvard Business School. OHRM designed and launched the Women's Leadership Development Program, and 60 employees completed the five-week pilot program.

Census collaborated with subject matter experts (SMEs) to develop resources and upskill employees to address skills gaps, emphasizing a core set of mission-critical occupations. Key accomplishments for this initiative included providing new resources and tools to support the transformation effort; published the Computer Scientist series 1550 position descriptions for Artificial Intelligence (AI) and non-AI; launched a 12-week AI Bootcamp from which over 350 employees graduated from 13 different learning paths; and hosted the Machine Learning/Artificial Intelligence Showcase attended by 218 participants, and provided 50 licenses for Udemy skills-based certifications and courses.

NIST offered a series of Managing in a Hybrid Work Environment seminars. These deep-dive training sessions were provided to focus on practical tools for working and managing in a hybrid work environment. The sessions provided opportunities to share resources and best practices and to discuss how to effectively build relationships and team culture, manage one-on-one and team meetings, support work/life balance, and provide coaching and feedback to team members. Follow-up coaching sessions were offered, as well, to help add practical perspectives to the lessons learned. NIST created and launched the NIST Hybrid Workers Self-Care training. This training provided valuable tips and practices to assure employees success in a hybrid work environment.

Created more workforce agility, flexibility, and capabilities to accommodate expanded mission areas and the future of work
OHRM drafted and socialized new strategic workforce planning framework. OHRM enhanced a suite of planning tools to improve organizational analysis and planning efforts.

Census initiated plans for a gap analysis to align and support workforce supply and demands with mission-critical demands and business strategies; established a Resource Sharing Program for managers to leverage operating unit resources to address interpersonal and technical competency gaps, budget shortfalls, and staffing shortages while supporting succession planning and knowledge transfer. Additionally, Census developed a Reorganization Submission Tool to enhance customer experience, streamline communications, and improved tracking efficiency during the reorganization process.

NIST launched automated telework agreements for access to data and program oversight. NIST implemented new remote work guidance in line with the Department's stance on in-person collaboration.

The ITA Knowledge Management Team successfully deployed a redesigned ITA Central intranet home page. This modernization restructured the navigation and color scheme, enabled a hub feature on SharePoint to improve search capabilities and design, integrated Microsoft Teams to improve productivity and access to organizational information on multiple devices, and added the ITA Connect expertise locator. The ITA Central redesign also included collaboration with ITA's Office of Public Affairs to use SharePoint newsletters as emails and broadcasts to increase access to announcements about the operating unit. Additionally, the hub feature highlights ITA's Diversity and Inclusion site to increase access to news and events organized by the DIAC.

Performance Indicators Results

Class	Operating Unit	Performance Indicator	FY 2020 Actual	FY 2021 Actual	FY 2022 Actual	FY 2023 Actual	FY 2024 Actual	FY 2024 Target	FY 2024 Status
Current/ Recurring	DM	Score on the Employee Experience Index (EXI) of the Federal Employee Viewpoint Survey	—	—	—	76%	77%	77%	Met
Current/ Recurring	DM	Training and Development Activities on Career Management and Development	813,660	712,044	643,576	678,790	817,221	712,729	Exceeded
Current/ Recurring	DM	Score on the Diversity, Equity, Inclusion, and Accessibility (DEIA) Index from the Federal Employee Viewpoint Survey	—	—	75%	76%	77%	77%	Met
Current/ Recurring	DM	Score on the Employee Engagement Index (EEI) of the Federal Employee Viewpoint Survey	76%	76%	75%	76%	77%	77%	Met

Strategic Conclusions

A talented and diverse workforce is critical to the Department's effective delivery of services. The Department has found that the following key enablers are crucial to hiring, developing, and retaining a mission-ready workforce: 1) implementing workforce planning to enhance succession planning efforts, 2) evaluating strategies to improve hiring timeline and employee engagement, 3) expanding continuous learning opportunities, and 4) addressing staffing gaps for mission critical occupations.

STRATEGIC OBJECTIVE 5.3 – Equitably deliver exceptional customer experience

Lead Operating Unit: Office of the Secretary
Contributing Operating Units: All Operating Units

Key Strategies:
- Identify actionable information to eliminate customer pain points and increase customers served
- Enhance equitable digital and nondigital customer engagement and service-delivery
- Drive high-quality customer service, assistance, and satisfaction by improving initial interactions with the public
- Improve customer data standardization, integration, and analysis

Executive Summary of Progress

The Department of Commerce advanced its customer experience (CX) capabilities by focusing on the following three pillars: 1) strategy, 2) governance, and 3) engagement.

Strategy
The Department, through its Office of Performance Excellence, held two co-creation strategy sessions with approximately 45 "CX Pioneers" from across the Department. As a result of these sessions, the CX Pioneers identified five strategic enablers to guide development of the Department's CX strategy:

- Culture
- Tools and Resources
- Workforce
- Partnerships
- Standards and Measurement

These sessions also yielded a CX Communication and Action Plan with short-term goals and milestones to mature CX and align with digital experience (DX) efforts.

Governance
The Department launched its first Department-wide CX Steering Committee and developed its first CX mission, vision, and governance charter. This work marks a significant step to establish a unified governance structure that fosters collaboration and alignment across operating units and enables the consistent application of CX standards.

Engagement

The Department celebrated its first-ever DOC-wide CX Day recognition event on October 3, 2023. This event kicked off FY 2024 by emphasizing the importance of CX to the Department and built interest among its employees. Also during FY 2024, the Department launched its inaugural CX Champion and CX Advocate Cohort Training Program, which used industry-leading curricula to train and equip 30 CX Champions and 20 CX Advocates with practical CX skills to improve services and address customer needs effectively. These efforts demonstrated a strong return on investment. 86% of respondents reported they were satisfied with the quality of the trainings. Respondents also reported a 27% to 53% increase in their confidence levels across six CX core competencies. Successful graduates from the program have already begun identifying and applying their CX skills to real-world projects. These CX Champions and CX Advocates now form the core of the Department's first-ever CX Community of Practice.

The Department also continued its engagement with the Department's three High Impact Service Providers (HISPs), including the Census Bureau, ITA, and USPTO, to align CX efforts, share best practices, and support tailored service improvements that address specific stakeholder needs.

The Department took steps to implement key elements of the 21st Century Integrated Digital Experience Act (IDEA) and OMB M-23-22, *Delivering a Digital-First Public Experience*. The Office of the Chief Information Officer and the Office of Public Affairs partnered to transform the Department's Website Advisory Council into a new Digital Experience Council to oversee implementation of 21st Century IDEA Act requirements

Through these initiatives, the Department fostered a culture of continuous improvement, strengthened collaboration across operating units, and positioned the Department to deliver more accessible, effective, and customer-focused services that meet the expectations of the American public.

Census Bureau

The Census Bureau Customer Experience team, in collaboration with the U.S. Department of Labor's Bureau of Labor Statistics (BLS), developed an online option for people to respond to the Current Population Survey (CPS), which provides vital and timely information about the American economy. The CPS team conducted usability testing from June to September 2024.

The Census Bureau also deployed new supply chain visualizations to the public in the Census Business Builder tool and is nearly complete with plans to deploy similar tools. The Commodity Flow Survey (CFS), primarily used by the U.S. Department of Transportation and local transportation planners, measures the domestic movement of goods by collecting shipment records from businesses across America. Census explored opportunities for the CFS to capture and integrate new data sources to produce more timely and granular information about our nation's transportation and supply chain infrastructure.

International Trade Administration (ITA)

ITA designated two high-impact priority services for focused CX and service delivery improvements following its designation as a HISP by the Office of Management and Budget (OMB) in December 2023. The initial phase of its first service was completed and announced by the Secretary of Commerce in May 2024, which involved the redesign of the Export Solutions section of ITA's trade.gov website. ITA also identified matchmaking services offered at domestic trade events as its second service focus area and initiated research to evaluate and elevate the experience and effectiveness of this service. ITA established a Voice of Customer program (VOC) to enable a unified approach to collecting, analyzing, reporting, and acting on customer feedback. The

VOC program launched two digital survey programs on ITA's website, released two other business unit-specific surveys, and designed a Salesforce-case feedback capture to increase customer understanding.

Additionally, ITA initiated testing of comprehensive digital outreach communication campaigns to improve the reach and impact of ITA resources and crafted a social media playbook to better engage and inform ITA audiences. ITA likewise identified and charted small-scale iterative website optimizations to improve accessibility, clarify communication, and standardize customer experience. To build a customer-centric culture and embed CX practices, ITA graduated a second Cohort of CX champions who participated in a year-long training and companion workshops with ITA-specific CX projects. ITA also launched a CX Community of Practice with champion alumni for in-house capacity building. With the support of these groups, ITA executed research to develop an initial set of customer personas to better understand the needs, motivations, and pain points of customers as well as inform a more effective design of its products and services, communications, and content delivery.

United States Patent and Trademark Office (USPTO)

USPTO met and exceeded its FY 2024 CX targets. The positive satisfaction rate for applicants filing a patent application was 76%, and the rate for trademark filers was 77%, exceeding the targets of 70%. The percentage of customers who indicated the employees they interacted with were helpful was 83% for patents and 80% for trademarks. These figures exceeded the FY 2024 targets of 75%. The percentage of customers who trust USPTO to grant patents and register trademarks in accordance with U.S. laws and regulations was 74%, over the 65% target.

USPTO prioritized improving CX in FY 2024 to better serve its patent and trademark applicants. As a HISP, USPTO maintained its focus on its two designated services: applying for a patent and registering a trademark. Efforts included targeted initiatives for patent pro se applicants, a group that often encounters challenges navigating the application process.

To enhance CX, USPTO launched "The CX Basics—Introduction to Customer Experience" online training for all new employees, equipping staff with skills to improve services. USPTO delivered on key CX action plan commitments, such as enabling DOCX-format patent submissions, scaling the Trademark Center beta to all users, and strengthening customer education and feedback collection efforts. Surveys of patent and trademark applicants, including independent filers and small businesses, informed updates to the Patent Center and Trademark Center, ensuring an accessible filing experience for all.

National Ocean and Atmospheric Administration (NOAA)

The National Oceanic and Atmospheric Administration (NOAA) completed a pilot study to better understand the needs and experiences of extreme precipitation data super users. These super users include floodplain managers, water utility directors, and transportation engineers. Insights from this study are now informing NOAA's development of products such as Atlas 15, the update to the National Precipitation Frequency Standard.

Additionally, NOAA conducted a separate customer experience pilot focused on users without technical science backgrounds. This pilot explored the needs of professionals in health, housing, and small businesses like aquaculture. The findings support NOAA's goals of promoting equity and building a more climate-ready nation by ensuring that its products and services are accessible and relevant to a broader audience.

Performance Indicator Results

Class	Operating Unit	Performance Indicator	FY 2020 Actual	FY 2021 Actual	FY 2022 Actual	FY 2023 Actual	FY 2024 Actual	FY 2024 Target	FY 2024 Status
Current/ Recurring	USPTO	Percentage of customers who indicate the employees they interacted with were helpful (Patents)	—	—	—	85%	83%	75%	Exceeded
Current/ Recurring	USPTO	Percentage of customers who indicate the employees they interacted with were helpful (Trademarks)	—	—	—	86%	80%	75%	Exceeded
Current/ Recurring	USPTO	Percentage of customers who indicate positive satisfaction with designated priority services (Trademarks: filing an initial application form for a trademark registration)	—	—	—	80%	77%	70%	Exceeded
Current/ Recurring	USPTO	Percentage of customers who indicate positive satisfaction with designated priority services (Patents: seeking assistance when filing a patent application form)	—	—	—	82%	76%	70%	Exceeded
Current/ Recurring	USPTO	Percentage of customers who trust the USPTO to grant patents and register trademarks in accordance with U.S. laws and regulations.	—	—	—	68%	74%	65%	Exceeded

Strategic Conclusions

In FY 2024, the Office of Performance Excellence, Census Bureau, ITA, USPTO and NOAA, collectively demonstrated how prioritizing CX as a strategic focus can lead to meaningful improvements in service delivery, accessibility, and stakeholder engagement. Through targeted pilots, customer feedback programs, governance structures, and workforce training, these entities not only enhanced their current services but also established frameworks for sustained innovation in federal government service delivery.

Key to these achievements is the alignment of CX initiatives with broader agency missions and priorities. The Census Bureau's advancements in data accessibility and visualization underscore the importance of tailoring CX strategies to diverse stakeholder needs. ITA's emphasis on trade facilitation, NOAA's focus on equity and climate resilience, and USPTO's efforts to build trust and accessibility illustrate the value of tailoring CX strategies to diverse stakeholder needs. Department-wide CX governance through the newly established CX Steering Committee, coupled with the new CX Community of

Practice, have fostered collaboration and are working to implement universal CX standards. The Department's investment in training 30 CX Champions and 20 CX Advocates further embedded CX capabilities across the Department, equipping employees with the skills to implement impactful changes.

The Department of Commerce is well-positioned to build on these successes. By continuing to align CX with digital and employee experience initiatives, sharing best practices, and focusing on measurable outcomes, these efforts will drive stronger public trust and more effective Federal services.

STRATEGIC OBJECTIVE 5.4 – Make Department facilities and operations more sustainable and efficient

Lead Operating Unit: Office of the Secretary
Contributing Operating Units: All Operating Units

Key Strategies:
- Reduce greenhouse gas emissions and increased use of renewable energy at Department facilities
- Maximize conversion of the Department's Federal vehicle fleet to electric vehicles
- Enhance sustainable acquisitions and electronic stewardship across procurement, acquisitions, IT, and facilities
- Institute a culture of sustainability across all Departmental functions

Executive Summary of Progress

The Department took many steps towards fulfilling Strategic Objective 5.4 in FY 2024 including:

Reduced greenhouse gas emissions/Increasing renewable energy use at Department facilities by:
- Deploying onsite renewable energy systems at National Institute of Standards and Technology (NIST) facilities in Gaithersburg, Maryland and Kauai, Hawaii, the National Oceanic and Atmospheric Administration (NOAA) Radar Site in Tucson, Arizona, the NOAA Next Generation Weather Radar Station in Miramar, California, NOAA's Pohnpei Weather Service Office in the Federated States of Micronesia, NOAA's Weather Forecasting Office in Baltimore, Washington D.C., and at NOAA's Weather Forecasting Office in Puerto Rico. NOAA will maintain its efforts to create more renewable energy opportunities.

- Coordinating Departmental applications for and successfully received three Department of Energy Assisting Federal Facilities with Energy Conservation Technologies (AFFECT) highly competitive grants to make Department facilities net zero emissions through deploying renewable energy and battery storage systems. Grants awarded include:

  o $5.09 million to make the NOAA Mauna Loa Atmospheric Baseline Observatory a net zero emissions facility.
  o $3.6 million to make the NOAA American Samoa Atmospheric Baseline Observatory a net zero emissions facility.
  o $550,000 for a feasibility study for Department Headquarters to explore geothermal heat options to replace natural gas fueled steam use.

- Collaborating with the Department of Energy Federal Energy Management Program's (FEMP) Resilience Planning Program Support Office to complete several facility assessments that identified the most critical and at-risk energy and water infrastructure using the Technical Resilience Navigator Tool.

- Executing a Central Utility Plant Modernization and Underground Replacement Program on the NIST Campus in Gaithersburg, Maryland. This project modernized the 1950s design and structure and upgraded the underground utilities to improve campus operational reliability through increased resiliency, maintainability, and sustainability. The modernization will also allow the campus to grow in alignment with its 2018 Master Plan and Environmental Assessment and increased energy demands.

- Entering a 10-year General Services Administration (GSA) PJM Interconnection, LLC Bundled carbon pollution free electricity (CFE) Procurement at NOAA's Geophysical Fluid Dynamics Laboratory which will provide CFE to one of NOAA's largest laboratories and data centers at a fixed rate for the foreseeable future.

Maximized conversion of the Department's Federal vehicle fleet to electric vehicles by:
- Adding 21 zero-emission vehicle (ZEV) to the Department's fleet.

Enhanced sustainable acquisitions and electronic stewardship across procurement, acquisitions, IT, and facilities by:
- Updating the Commerce Acquisition Manual 1323.70 Green Procurement Program to include updates based on the Federal Acquisition Regulation (FAR) 23.103 Sustainable Acquisitions, effective December 4, 2023.

Instituted a culture of sustainability across all Departmental functions:
- The Office of Sustainable Energy and Environmental Programs (OSEEP) held nine online training courses in FY 2024, as part of its web-based training and education program with multidisciplinary series including Climate Literacy, Sustainability 101, Environmental Compliance, and Technical Development. Training and educational series were offered to all Department employees through the Commerce Learning Center and recorded for future use. In FY 2024, over 800 Department employees registered/attended training sessions on topics such as Executive Order 14057: Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability, ZEV Workplace Charging, and the Smart Labs Program.

Performance Indicator Results

Class	Operating Unit	Performance Indicator	FY 2020 Actual	FY 2021 Actual	FY 2022 Actual	FY 2023 Actual	FY 2024 Actual	FY 2024 Target	FY 2024 Status
Current/ Recurring	DM	Number of fleet vehicles converted to or replaced by fully electric or hybrid	—	11	9	19	4	21	Not Met
Current/ Recurring	DM	Renewable energy plus non-electric renewable energy used (as a percentage of total electricity use)	13.8%	10.7%	14.5%	21.0%	25.0%*	7.5%	Exceeded

*Note that the FY 2024 actual provided in the table is projected end-of-year value and does not represent the finalized FY 2024 actual. The status of the performance indicator will be updated at the beginning of the next calendar year.

Strategic Conclusions

The Department's vision for building an organization prepared for the climate crisis using carbon pollution-free electricity, zero-emission vehicles, and net zero emission buildings, includes the following steps:

- Utilize the Department's power of procurement to create equitable economic opportunities and invest in and maintain climate-ready, resilient, and sustainable facilities, products, and services.
- Improve the accuracy of the Department's energy, water, and waste data and real property portfolio through data validation, evaluations, and assessment of the Department's facilities.
- Replicate successful projects at similar facilities throughout the Department's portfolio through the development of project templates and centralized contracting opportunities using direct funding, performance contracting, and grants where feasible (e.g., The Department of Energy's Assisting Federal Agencies with Energy Conservation Technologies Grant Program).
- Pursue energy and water efficiency upgrades, sustainable design, climate-resilient features, and electric vehicle supply equipment, concurrently with all construction and major renovation projects and ensuring master plans and design guides incorporate sustainable and climate-resilient parameters.
- Recognize Department employees for outstanding performance in implementing exceptional projects or programs that help the Department achieve its mission while reducing greenhouse gas emissions, improving energy and water conservation and environmental performance through the Department's Sustainability, Energy, and Environmental Ambassadors program and the Energy and Environmental Stewardship Awards.
- Provide no-cost, engaging Department training on climate adaptation and resilience; sustainability; energy, water, and waste reduction; and environmental compliance topics to maintain a knowledgeable, effective, and climate-literate workforce.

STRATEGIC OBJECTIVE 5.5 – Modernize mission support processes and infrastructure

Lead Operating Unit: Office of the Secretary
Contributing Operating Units: All Operating Units

Key Strategies:
- Accelerate information technology (IT) modernization
- Advance equity and accountability in mission-focused acquisition, procurement, and grant execution
- Eliminate service duplication and operational inefficiencies across the Department's dispersed mission support functions by integrating them into the Enterprise Services (ES) model
- Monitor compliance with all Federal cybersecurity standards and establish systems to identify emerging vulnerabilities
- Simplify and incorporate enabling technology in core processes

Executive Summary of Progress

Office of the Chief Information Officer (OCIO)
During FY 2024, the Department's Office of the Chief Information Officer (OCIO) enhanced cybersecurity and IT operations. The office deployed the Zero Trust Architecture (ZTA) Enterprise Identity Management Solution (IDMS) to nine of the Department's 14 operating units, ensuring that Enterprise applications implemented phishing-resistant, application-layer multifactor authentication (MFA) in alignment with Strategic Objective 5.5. OCIO also procured and began deploying the ZTA Network capability, which integrates critical features such as Distributed Denial of Service (DDoS) protection, a Content Delivery Network (CDN), a Web Application Firewall (WAF), and ZTA Network Architecture.

Within OCIO, the Enterprise Security Operations Center (ESOC) enhanced cybersecurity measures by implementing ZTA Enterprise IDMS across all ESOC tools to support MFA. ESOC onboarded all operating units to the latest version of the Cybersecurity and Infrastructure Security Agency (CISA) Protective Domain Name System (PDNS), enabling CISA to detect and prevent cyberattacks targeting federal civilian executive branch (FCEB) agency networks. ESOC completed 11 vulnerability assessments and two High-Value Asset (HVA) tests, identified 175 findings, and remediated 171 of them. Additionally, ESOC integrated Synack vulnerability management into its Software as a Service (SaaS) incident response ticketing system, which improved the tracking, management, and remediation of security vulnerabilities. ESOC also developed and deployed a new Application Programming Interface (API) connection to streamline data exchange and improve real-time monitoring.

OCIO drove modernization efforts through initiatives like the Enterprise Continuous Diagnostics and Mitigation (ECDM) program. The office deployed a new Asset and Vulnerability Aggregation capability, which improved the quality of data reported to the Continuous Diagnostics and Mitigation (CDM) and Federal Dashboards. OCIO ensured compliance with CISA Binding Operational Directive 23-01 by reporting on mobile asset and vulnerability data.

The office also published the Department Artificial Intelligence (AI) Use Case Inventory and implemented text message archiving to meet statutory compliance requirements.

OCIO collaborated with the Office of the General Counsel (OGC) to publish policies on email and electronic messaging and the Office of the Secretary (OS) Capstone Policy. The office supported the Office of Inspector General's (OIG) transition to a separate network and decommissioned the legacy network. OCIO re-established the Department Enterprise Software Asset Management (eSAM) working group, conducted monthly Software License Inventory (SIL) data calls, and deployed a unified Section 508 accessibility checklist with accompanying training.

Census Bureau
The Census Bureau launched initial capabilities of the Census Business Ecosystem (BE) for the Special Census and Annual Integrated Economic Survey. This included data collection improvements through Data Ingest and Collection for the Enterprise (DICE) and centralized data management with the Enterprise Data Lake (EDL). The Bureau also contributed to the Federal Zero Trust Data Security Guide and Companion Guide to enhance data protections.

FirstNet Authority
FirstNet Authority advanced its IT modernization initiatives by transitioning production systems to Internet Protocol version 6 (IPv6), aligning with the Department's IT modernization strategies. FirstNet also implemented tools for incident response and cybersecurity compliance and automated workflows for improved efficiency and traceability.

International Trade Administration (ITA)
ITA improved operational efficiency through new tools, such as the Statistical Analysis System (SAS) integration for advanced analytics and the Passport and Visa Dashboard for streamlined travel planning. ITA also modernized records management by transferring analog records to the Federal Records Center in compliance with Office of Management and Budget (OMB) directives.

Minority Business Development Agency (MBDA)
MBDA adopted a cloud-first strategy, migrating systems to the Salesforce Government Cloud for improved flexibility and resource management. MBDA also enhanced cybersecurity measures, automated processes, and expanded training initiatives to strengthen operational effectiveness.

National Oceanic and Atmospheric Administration (NOAA)
NOAA introduced 11 petaflops of new computing capacity in its High-Performance Computing (HPC) program and integrated graphical processing units (GPUs) for AI and machine learning applications. NOAA expanded open access to its datasets, providing over 60 petabytes (PB) of machine-readable data through cloud service providers and partnering in AI research initiatives.

U.S. Patent and Trademark Office (USPTO)
USPTO leveraged artificial intelligence (AI) and machine learning (ML) technologies to enhance agency functions and mitigate risks. The office fully deployed the Patent Center system, replacing legacy tools, and completed encrypting all cloud-stored data in compliance with Executive Order 14028.

USPTO launched the Trademark Public Search tool to improve user experience for searching trademark data and replaced outdated infrastructure like the 40-year-old Trademark Reporting and Application Monitoring (TRAM) mainframe.

USPTO reduced maintenance overhead by decommissioning 45 outdated components and increasing the number of cloud components by 13. The office also transitioned 93 products to the NIST SP 800-53 Rev 5 control structure. Additionally, USPTO delivered the cloud-based Court Notification Processing System (CNPS) for the Solicitor's Office within the Office of General Counsel, replacing the Notification of Suits Processing System (NOSPS) with a more efficient solution.

Performance Indicator Results

Class	Operating Unit	Performance Indicator	FY 2020 Actual	FY 2021 Actual	FY 2022 Actual	FY 2023 Actual	FY 2024 Actual	FY 2024 Target	FY 2024 Status
Current/ Recurring	DM	Dollars (Percentage) awarded using high-risk contracting authorities	20.0%	19.1%	26.0%	26.9%	36.0%	46.9%	Exceeded
Current/ Recurring	DM	Number of employees with Federal Acquisition Certification for Program and Project Managers (FAC-P/PM)	374	434	474	528	553	437	Exceeded
Current/ Recurring	DM	Percentage of obligations to small, disadvantaged businesses	17.7%	23.4%	25.7%	25.5%	24.9%	21.8%	Exceeded
Current/ Recurring	DM	Improve the Department's Federal Information Technology Acquisition Reform Act (FITARA) score	—	—	3.0	3.0	2.5	2.0	Exceeded

Strategic Conclusions

The Department faces challenges in maintaining post-deployment ZTA capabilities. These challenges could lead to coverage gaps if some operating units fail to fully commit or if funding becomes insufficient. Leadership engagement across operating units is essential to mitigate these risks. ECDM is addressing rising software costs while working to consolidate hardware and software management across the Department to enhance visibility and control.

Modernizing existing information technology presents a challenge in ensuring uninterrupted service during development and cutover to new systems. Planning must prioritize maintaining service availability to avoid production interruptions. Additionally, reliance on proprietary technology increases costs and makes it difficult to transition to alternative vendors. By prioritizing open standards during the solutions analysis phase, the Department can reduce dependency risks and promote flexibility.

The BEA OCIO prioritizes initiatives, but legacy systems limit modernization efforts and hinder integration with emerging technologies. Recruiting and retaining skilled professionals in a competitive IT labor market remains a significant challenge, affecting project timelines and quality.

NOAA programs and service providers have advanced toward IT best practices, giving the agency an early advantage in implementing ZTA. NOAA is addressing gaps by focusing on leveraging cost-effective services from Government partners that align with its mission requirements. To drive innovation, NOAA must continue investing in its data enterprise, particularly to support its growing research in AI and ML. This effort will require adopting new approaches to computer and data resources to meet evolving mission demands.

USPTO's modernized systems deliver greater resilience, enhanced security, higher throughput, and scalability. Retiring legacy systems allows product teams to concentrate on quality improvements and further modernization efforts. By migrating additional systems to the cloud, USPTO aims to provide secure, reliable data while improving throughput to meet examiner and customer needs.

USPTO ensures robust cybersecurity measures are in place to protect, detect, react, and restore operations, even during adversarial attacks. The agency updates corporate systems throughout their life cycles to maintain its security posture through risk assessments and mitigations. Annual cybersecurity assessments confirm the agency's systems exhibit strong resilience and security.

OAM met most performance targets but faces difficulties in meeting the Department's Ability One goal set by the Office of Federal Procurement Policy (OFPP). This goal aims to create employment opportunities for individuals who are blind or severely disabled. OAM is rethinking acquisition strategies for services and subcontracting opportunities to increase consideration for Ability One vendors.