

# U.S. DEPARTMENT OF COMMERCE

OPEN GOVERNMENT PLAN, SEPTEMBER 2022

**VERSION 7.0** 

OPEN@doc.gov

### **FOREWORD**

September 2022

The U.S. Department of Commerce's ("Department") sustained commitment to the principles of Open Government is presented in the release of the September 2022, version 7, "Department of Commerce Open Government Plan" (Plan). The Plan endures as a valuable platform in which to highlight the Department's efforts to uphold the principles of transparency, participation, and collaboration. These principles are inherently aligned with the Department's mission to create the conditions for economic growth and opportunity for all communities.

The release of the Plan builds on the Department's long history of innovative approaches to data dissemination and adopting new tools and technology to facilitate the principles of open government. The Department continues to add high value data sets to Data.gov; develop partnerships with the private sector, academia, and nonprofit organizations; create online tools to improve private sector access to Department services and to enhance understanding of its funding opportunities; and, increase the use of social media tools to encourage public participation.

The Department continues to be a leader in Open Government across the Federal government by encouraging and striving for increased participation and collaboration among our employees, external government agencies, and the American people. Our mission to create the conditions for economic growth and opportunity for all communities can only be achieved with a mindset towards openness, a mindset that is shared by the Department and our 13 bureaus and operating units (BOUs).

This Plan includes progress updates from our BOUs on previously reported Open Government initiatives that support the core mission of the Department. Our "What's New" section describes new and expanded initiatives.

We invite you to visit our Open Government <u>website</u> and encourage you to share your thoughts or suggestions by submitting comments to <u>OPEN@doc.gov</u>.

Sincerely,

Charles R. Cutshall
Chief Privacy Officer and
Director, Office of Privacy and Open
Government

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### Introduction

Open Government is important to the U.S. Department of Commerce ("Department") mission to create the conditions for economic growth and opportunity for all communities. Through its 13 bureaus and operating units or BOUs, the Department gathers economic and demographic data to measure the health and vitality of the economy, promotes U.S. exports, enforces international trade agreements, and regulates the export of sensitive goods and technologies. The Department also issues patents and trademarks; protects intellectual property (IP); forecasts the weather; conducts oceanic and atmospheric research; provides stewardship over living marine resources; develops and applies technology, measurements and standards; formulates telecommunications and technology policy; fosters minority business development; and, promotes economic growth in communities across the country.

The Department posts regular updates to its Open Government Plan ("Plan") at <a href="www.Commerce.gov/open">www.Commerce.gov/open</a>. Open Government Plan 7.0 provides an overview of the Department's 2022-2026 Strategic Plan and status of programs and assessment of functional areas, which are critical to Open Government. To learn more, follow us on social media:

Facebook (https://www.facebook.com/Commercegov)

YouTube (<a href="http://www.youtube.com/user/CommerceNews">http://www.youtube.com/user/CommerceNews</a>)

Twitter (<a href="https://twitter.com/CommerceGov">https://twitter.com/CommerceGov</a>)

Flickr (https://www.flickr.com/photos/commercegov/)

### What's New

This section of the Plan includes a discussion of some of our new initiatives or projects. For instance, the Department is always looking for new ways to make its data more accessible and useful for the public while protecting privacy. In addition to the large amounts of data and information the Department makes publicly available, for example, at Data.gov, USAspending.gov, FOIAonline, eRulemaking, Regulations.gov, Export.gov, and Grants.gov, much information is disseminated through the agency's websites. New initiatives or projects include:

About 2020 Census Data Products

2020 Post-Enumeration Survey

2020 Census Evaluations and Experiments

The Economic Development Administration plans to launch the New Good Jobs Challenge Performance Measurements in late 2022.

### The Department of Commerce COVID-19 Information Hub

# **Background**

On December 8, 2009, the Office of Management and Budget (OMB) issued Memorandum M-10-06, known as the Open Government Directive to provide guidance on specific actions federal agencies must take to increase transparency, participation, and collaboration in government, and established a requirement for agency publication of an Open Government Plan. In 2010, the Department published its first Open Government Plan,



establishing its commitment to implementing the principles of transparency, participation, and collaboration among Department employees, as well as with other government agencies and the public. Today, in 2022, the Department continues to uphold the principles through Departmental and agency projects and initiatives that align with its mission to create the conditions for economic growth and opportunity.

# Program Oversight and the Open Government Senior Leaders Group

The Department carries out its programmatic responsibilities through its <u>13 bureaus and operating units</u>.

Office of the Secretary (OS)

Office of Inspector General (OIG)

Bureau of Economic Analysis (BEA)

Bureau of Industry and Security (BIS)

Bureau of the Census (Census)

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)

U.S. Patent and Trademark Office (USPTO)

Each of these BOUs, through their distinct missions, contributes to the Department's overall objective of promoting economic growth for the nation and providing opportunities for all Americans. These bureaus and operating units are driving Open Government through a wide range of projects and initiatives highlighted in this Plan.

The Department's Director of Open Government continues to provide direction and oversight to the Open Government Senior Leadership (OGSL) group. The OGSL group was established in March of 2010 to promote the integration of Open Government principles into each of the BOUs programs and business lines. Today, the OGSL group, through its designated points of contact, continues to develop and implement best practices and procedures for sharing and providing public access to information, while ensuring appropriate protections for confidentiality, privacy, national security, as well as other restrictions that may be required by law.

# Innovation, Equity, and Resilience - An Overview of the 2022-2026 Strategic Plan

Innovation, equity, and resilience are the concepts that drive the Department's work and are outlined in the Department's Strategic Plan 2022-2026. These concepts provide a broad foundation for economic growth and opportunity by focusing on five (5) goals:

Drive U.S. Innovation and Global Competitiveness
Foster Inclusive Capitalism and Equitable Economic Growth
Address the Climate Crisis Through Mitigation, Adaptation, and Resilience Efforts
Expand Opportunity and Discovery Through Data
Provide 21st Century Service with 21st Century Capabilities

Transparency, collaboration, and participation are inherent in the vision laid out in the Department's Strategic Plan. The Department and its BOUs will work together to drive progress in the five (5) goals and priorities, identified above. The Strategic Plan emphasizes that the foundation of the Department's goals is data. Data is what American businesses and communities use to plan investments and identify growth opportunities. Whether it is ITA determining which foreign markets to target, EDA understanding a regional economy, NOAA's weather and climate data helping predict severe events and enabling weather forecasts, or NIST data and models catalyzing advanced manufacturing, the Department's data enables the setting of conditions that enable economic growth. The Department's data enables start-ups, moves markets, protects life and property, and powers both small and multibillion-dollar companies. BEA produces estimates of Gross Domestic Product (GDP), a key indicator of the health of the economy. Census carries out the constitutionally mandated decennial census, which determines the allocation of billions of federal dollars for states and the drawing of Congressional districts. Data is not only a means of advancing trade, innovation, and environmental goals, it is also a national asset with untapped potential.

# **Program and Functional Area Updates**

# **Open Data**

Known as America's data agency, the Department of Commerce is home to nearly one hundred thousand datasets that include weather and satellite data, broadband frequency, trade information, and demographic surveys. The Department's commitment to improving public access to this data is enshrined in its strategic plan, which includes a goal to "expand opportunity and discovery through data."



To drive towards this goal, the Department has refreshed the Commerce Data Inventory and developed a new <u>Inventory website</u> where users can "Explore, View, and Connect" with Commerce data in one place. This information is automatically updated weekly. We also ensure that this information is regularly and accurately published to Data.gov for broad public consumption. The site also supports Commerce's strategy to enable more efficient data access, analysis, and discoverability and to comply with the requirements of the <u>Evidence Act of 2018</u> and the <u>Open Data Policy</u>.

For more information on some of the bureau's responses to Open Data, please visit the following resources:

Bureau of Economic Analysis (BEA)

Bureau of Industry and Security (BIS)

Bureau of the Census (Census)

Economics and Statistics Administration (ESA)

International Trade Administration (ITA)

National Institute of Standards and Technology (NIST)

National Oceanic and Atmospheric Administration (NOAA)

National Telecommunications and Information Administration (NTIA)

National Technical Information Service (NTIS)

U.S. Patent and Trademark Office (USPTO)

Data.gov

# **Privacy**

The Department assigns high priority to privacy considerations for all systems and programs. It recognizes that individual trust in the privacy and security of personally identifiable information (PII) and business identifiable information (BII) is the foundation of trust in the government and the Department in the 21<sup>st</sup> Century. As an employer, a collector of data on millions of individuals and companies, the developer of information-management standards, and a federal advisor on information management policy, the Department strives to be a leader in best privacy practices and privacy policy.

OMB Memorandum M-13-13 requires federal departments and agencies to review information assets for privacy, confidentiality, security, or other restrictions on information released. The Department has a robust privacy program charged with assisting the Department and BOU CIOs with meeting this requirement. The necessary balance between the "presumption in favor of openness" and the duty to protect and safeguard PII and BII is well understood. The Department's Office of Privacy and Open Government (OPOG) works with the General Counsel, Chief Information Officer, and across BOUs to ensure that information is appropriately secured to prevent information loss or erroneous release.

Authorities and requirements for the **Department's Privacy Program** include:

The Privacy Act of 1974, 5 U.S.C. § 552a;

The E-Government Act of 2002;

The Federal Information Security Modernization Act (FISMA) of 2014, Public Law No. 113-283,

Cybersecurity & Infrastructure Security Agency, US-CERT Federal Incident Notification Guidelines (April 1, 2017);

OMB Circular A-130, "Managing Information as a Strategic Asset" (July 2016);

OMB Memorandum M-03-22, "OMB Guidance for Implementing the Privacy Provisions of the E-Government Act of 2002" (September 26, 2003);

OMB Memorandum M-11-02, "Sharing Data While Protecting Privacy" (November 3, 2010);

OMB Memorandum M-16-04, "Cybersecurity Strategy and Implementation Plan (CSIP) for the Federal Civilian Government" (October 30, 2015);

OMB Memorandum M-17-06, "Policies for Federal Agency Public Websites and Digital Services" (November 8, 2016);

OMB Memorandum M-17-12, "Preparing for and Responding to a Breach of Personally Identifiable Information" (January 3, 2017); and

The Department's Privacy Act regulations, located at 15 C.F.R. Part 4, Subpart B.

The Department's cyber-related (electronic) PII incident reports are submitted to the U.S. Computer Emergency Readiness Team (CERT), as well as the Department's Chief Privacy Officer (CPO) and the Enterprise Security Operations Center (ESOC), within one (1) hour of discovery/detection. If an assessment has been made that a PII breach constitutes a Major incident, the ESOC reports the

designation to US-CERT as soon as the Department has a reasonable basis to conclude that such a PII breach has occurred. The ESOC reports all non-cyber related (paper) PII incidents to the CPO within one (1) hour of a confirmed breach. Additionally, the Department produces and submits FISMA Senior Agency Official for Privacy (SAOP) reports in accordance with OMB guidance.

In September 2021, the Department published its most recent <u>Privacy Program Plan</u>, which describes how it provides the public with access to information regarding the Department's privacy program. The Privacy Program Plan was originally published in 2017 and is updated annually.

### Whistleblower Protection

The Whistleblower Protection Program is critical to ensuring transparency in government operations. The employees of the Department and its contractors, subcontractors, and grantees perform an important service by reporting what they reasonably believe to be evidence of wrongdoing, and the Department does not tolerate retaliation against whistleblowers. Both the Department and BOUs continue to ensure, in consultation with the U.S. Office of Special Counsel (OSC), that employees are informed of their rights and remedies under the prohibited personnel practices and whistleblower retaliation protection provisions of Title 5. The Whistleblower Protection Act of 2017 provides additional protections to federal employees who are retaliated against for disclosing waste, fraud, and abuse by increasing protections for federal employees, increasing awareness of federal whistleblower protections, and increasing accountability and requiring discipline for supervisors who retaliate against whistleblowers.

The Department's Whistleblower Protection Coordinator within the Office of the Inspector General (OIG), is charged with educating Department employees about their rights and pathways to reporting and educating Department employees about prohibitions on retaliation for whistleblowing, as well as their rights and remedies if anyone retaliates against them for making a protected disclosure.

The provisions of the Department's nondisclosure policies, forms, and agreements are consistent with and do not supersede, conflict with, or otherwise alter the employee obligations, rights, or liabilities created by existing statute or Executive Order relating to (1) classified information; (2) communications to Congress; (3) the reporting to an Inspector General or the Office of Special Counsel of a violation of any law, rule, or regulation, or mismanagement, a gross waste of funds, an abuse of authority, or a substantial and specific danger to public health or safety; or (4) any other whistleblower protection. The definitions, requirements, obligations, rights, sanctions, and liabilities created by controlling Executive Orders and statutory provisions are incorporated into the Department's nondisclosure agreements and are controlling. See:

Executive Order 13526;

Section 721 1 of Title 5, United States Code (governing disclosures to Congress); Section 1034 of Title 10, United States Code, as amended by the Military Whistleblower Protection Act (governing disclosure to Congress by members of the military); Section 2302(b)(8) and (13) of Title 5, United States Code, as amended by the Whistleblower Protection Act of 1989 (governing disclosures of illegality, waste, fraud, abuse or public health or safety threats);

Intelligence Identities Protection Act of 1982 (50 U.S.C. 421 et seq.) (governing disclosures that could expose confidential Government agents);

The statutes which protect against disclosure that may compromise the national security, including sections 641, 793, 794, 798, and 952 of title 18, United States Code; and,

Section 4(b) of the Subversive Activities Act of 1950 (50 U.S.C. 783(b)).

### Websites

The Department leverages its websites for Open Government. A Departmental Web Advisory Council (WAC) ensures policies are in place for consistency and ease of use of all Departmental websites. The internal WAC collection of pages on the Departmental intranet, Commerce Connection, ensures awareness of all mandatory policies and allows web managers and developers to collaborate on sharing best practices. In 2018, the WAC undertook the extensive task of reviewing, consolidating, and updating all of its web and social media policies to better align with federal requirements. Each BOU CIO is now required to certify annually that all websites comply with the policies published on this site by signing off on a detailed website inventory that reports item-by-item compliance and best practices.

# **Transparency**

The Department improves transparency by proactively participating in and posting its information publicly at Data.gov, IT Dashboard, USAspending.gov, and Commerce Data Hub. The Department fully participates in eRulemaking and all of the Department's BOUs use regulations.gov to post proposed and final regulations, and to receive comments from the public. In addition, the Department has a representative from the Office of the General Counsel (OGC) on the Advisory Board for eRulemaking who attends eRulemaking meetings and ensures the Department's view are considered as eRulemaking participants propose and evaluate potential improvements to the regulations.gov and fdms.gov websites. In addition, the Department has a representative from the Office of the Chief Information Officer on the Executive Steering Committee for eRulemaking who votes on how the contributions to the eRulemaking budget should be divided among the participating agencies. The Department relies on eRulemaking staff to keep the public abreast of new developments and improvements to regulations.gov, which is the primary mechanism by which the public accesses and can comment on regulatory actions from across the federal government.

### **Public Notice**

The Department has an extensive outreach program to ensure the public is informed and up to date on agency actions and business. The outreach programs include public meetings with livestreams, stakeholder meetings, and numerous technology-enabled public engagement forums that promote transparency, participation and collaboration. The Office of Digital Engagement, within the Department's Office of Public Affairs (OPA), specifically focuses on outreach efforts, ensuring effective two-way communications with the public about the Department's services. In addition, the Department is working through the BOUs to enable outreach to the appropriate communities of practice and interest (COPs/COIs) within the various business lines. You can read more about the Office of Digital Engagement in the OS Initiatives section of this document. Public notices about meetings and other notices, such as system of records notices, are also published in the Federal Register.

Below are BOU public outreach links:

Bureau of the Census Foreign Trade Outreach and Education

**Census Advisory Committees** 

International Trade Administration
Office of Advisory Committees

National Institute of Standards and Technology NIST Events

National Oceanic and Atmospheric Administration NOAA Federal Advisory Committees

National Telecommunications and Information Administration Internet Policy Task Force

U.S. Patent and Trademark Office USPTO Public Advisory Committees

# **Records Management**

The Department manages records in accordance with the Federal Records Act. The Department and its bureaus have implemented guidance provided by the National Archives and Records Administration. The Department's Chief Information Officer develops and establishes Department policy and standards to implement a Department Records Management Program and works with the National Archives and Records

Administration ("NARA," "National Archives") to ensure valuable records are carefully maintained for future use. Departmental Records Officers provide regular training to assist agency personnel in meeting their records management responsibilities. The Senior officials and political appointees are also briefed on the importance of appropriate records management. Overall, the Department ensures that valuable records are identified, protected, and preserved.

The Department transfers records of permanent historical or archival value to NARA. It helps in achieving NARA's mission to protect the rights of all Americans to drive openness, cultivate public participation, and strengthen our nation's democracy by ensuring unhindered citizen access to public information and archival documents.

Authorities and requirements for the Department's Records Management program include:

Basic Laws and Authorities of the National Archives and Records Administration

**NARA Regulations** 

**NARA Bulletins** 

Managing Government Records Directive (M-12-18)

Memos to Agency Records Officers

Records Management FAQs

White Papers and Reports

Records Management Transfer Guidance

Capstone Training and Resources

# Freedom of Information Act (FOIA) Requests



The electronic FOIA tracking system continues to help improve the efficiency of the Department's FOIA program. Designed to provide a more streamlined and transparent system for requesting information. All BOUs, other than the USPTO, use <u>FOIAonline</u>. This system allows anyone to submit a FOIA request, correspond with FOIA professionals processing the

request, track the status of a request, and download any responsive documents once they are released to the requester. Requesters who provide an email address receive email notifications informing them of when a request has been submitted, evaluated (scope, fee waiver, expedited processing issues), assigned, processed, and closed. It was announced that FOIAonline will be sunset effective September 30, 2023, requiring the Department to switch to a new tool to track and manage the FOIA process.

The Department's FOIA professionals also continually review FOIA business processes to determine the need for updates to ensure the program runs efficiently and effectively. The success of the Department's FOIA program is also measured through metrics, such as backlog reduction, age of backlogged requests, and backlog growth, which are reported and discussed on a quarterly basis during venues that include Quarterly FOIA Officer Roundtable meetings and Balanced Score Card reporting to senior management.

The Department continues to enhance response letters using customer service best practices. The <u>Departmental FOIA regulations</u> are published in the Federal Register.

In 2017, the Department published the <u>DOC FOIA Reference Guide</u>. The goal of this Reference Guide is to familiarize FOIA requesters with the specific procedures for making a FOIA request to the DOC. Following the information in the Guide helps requesters receive the information that they are seeking in the shortest amount of time possible. The Reference Guide also includes descriptions of the types of records maintained by different parts of the agency, some of which are readily available through means other than the FOIA.

Information on the Department's FOIA program can be found at <u>Commerce FOIA webpage</u> and/or <u>Electronic</u> Library (Formerly e-Reading Room).

Table 1 - <u>FOIAonline</u> Core Functionality

	FOIAonline Core Functionality
Accept Requests Online	<ul> <li>Allow requester to pre-populate their information</li> <li>Provide status to requesters</li> <li>Create communications (i.e. letters via email) between agencies and requesters</li> </ul>
Track Requests in a Case File	<ul> <li>Process and track FOIA request</li> <li>Break down requests into multiple tasks</li> <li>Multi-track processing (Simple, Complex, Expedited)</li> <li>Track time spent on requests</li> <li>Assign case numbers</li> <li>Start and stop the clock according to rules</li> <li>Keep an online folder of all documents related to a request (including notifications to requesters)</li> </ul>
Manage Deadlines	<ul> <li>Start/Stop the clock</li> <li>Generate backlog reports</li> <li>Monitor workload</li> <li>Notify FOIA professionals based on 10- and 20-day deadlines</li> <li>Close cases when fees are not paid (according to business rules)</li> </ul>
Calculate Fees	<ul> <li>Track fees and fee waiver processing</li> <li>Generate invoices</li> <li>Deduct what is free of charge (i.e. first 100 pages)</li> <li>Manually adjust recorded time</li> <li>Distinguish between search and review time</li> </ul>
Research and Upload Records	<ul> <li>Store consultations, referrals, and letters</li> <li>Send tasks to others with instructions about which records to search</li> <li>Upload scanned documents</li> </ul>
Publish Electronic Records	<ul> <li>Review/sign the case file to approve redactions and fee calculations</li> <li>Issue Partial/incremental releases</li> <li>Send system-generated email notifications to requesters</li> </ul>
Accept Appeals Online	<ul> <li>Track status and outcome of litigation and appeals</li> <li>Issue supplemental release after appeal</li> <li>Forward copies of processing to Appeals unit</li> </ul>
Prepare the Annual Report	<ul> <li>Prepare the report in the required format with the required data structure</li> <li>Use dashboards to display these metrics throughout the year, including trends</li> </ul>
Search and Retrieve	Searching (including metadata and full-text)

### **Proactive Disclosures**

All FOIA Officers routinely review FOIA requests to identify types of frequently requested records and other records of interest for proactive posting. Additionally, the Department continues to proactively post documents responsive to FOIA requests in an electronic format through FOIAonline, an automated online tracking and records management system, or the FOIA Electronic Library. Released documents are uploaded to FOIAonline or the Electronic Library, where they are available to the general public at no cost. Additionally, all FOIA professionals provide guidance and training to encourage proactive disclosures whenever possible. All component subject matter experts (SME) in various business units routinely identify records to be made publicly available.

### **Congressional Requests**

The Office of Legislative and Intergovernmental Affairs (OLIA) supports the Secretary of Commerce on matters pertaining to legislative issues, congressional relations, and on the Department's relationship with state, county, municipal, and tribal governments and their associations. OLIA is the focal point within the Department for coordinating all activities involving legislative and congressional relations and activities. The Assistant Secretary for Legislative and Intergovernmental Affairs is delegated authority to provide policy guidance and oversight of Department legislative and congressional relations and activities. The OLIA Assistant Secretary also develops an integrated Department plan to collect, coordinate, and distribute timely and accurate information relating to those relations and activities to the Secretary and the Department. OLIA accomplishes these goals with the support of the legislative affairs offices in the Department's BOUs.

OLIA's authorities rest with a <u>Department Organizational Order (DOO) 10-12</u>, <u>Assistant Secretary for Legislative and Intergovernmental Affairs</u>, which prescribes the top-level organization, authority, functions, and responsibilities of the Assistant Secretary for Legislative and Intergovernmental Affairs and therefore, OLIA.

In addition to the DOO, other OLIA responsibilities and procedures are laid out in Department Administrative Order (DAO) 218-2, Legislative and Intergovernmental Affairs, which details policies and procedures for responding to Congressional and Intergovernmental inquiries and outlines other procedures OLIA. for All of the **DAOs** can be accessed at the following website: http://www.osec.doc.gov/opog/dmp/daos.html.

Several other DAOs have portions that reference or relate to processes or duties to which OLIA is a party, including:

<u>DAO 202-334</u>, <u>Details</u>. This DAO has a section on the Department's details to Congressional Committees. Responsible Office: Assistant Secretary for Administration.

<u>DAO 218-3</u>, <u>Reports to Congress Required by Law</u>. The DAO prescribes the procedures and responsibilities for sending Departmental reports to Congress. In addition, it details clearance and signature authorities. The Assistant Secretary for Legislative and Intergovernmental Affairs is one (1) of the Secretarial Officers responsible for clearing Congressional reports. Responsible Office: OGC.

<u>DAO 218-1, Legislative Activities</u>. The DAO details the duties and policies of the Department with respect to legislative activities. Responsible Office: OGC.

### **Declassification**

The Department and BOUs, specifically those with Original Classification Authority (OCA) can declassify documents. The Director of the Office of Security (OSY) is one (1) of the three (3) OCAs within the Department who gives final approval for document declassification. Documents received are reviewed by the subject matter experts. When the declassification has been determined and if the document(s) have historical permanent value, they are transferred to NARA.

The OSY collaborates with NARA to develop schedules for the declassification of records in the National Archives of the U.S. and the presidential libraries to ensure declassification is accomplished in a timely manner. NARA provides information about the records proposed for automatic declassification. The BOUs consult with the Department's Records Management Officer before reviewing records in their holdings. This ensures that appropriate procedures are established for maintaining the integrity of the records and provides NARA with accurate information about BOU declassification actions when records are transferred to NARA. NARA provides guidance to the Department's Records Management Officer concerning the requirements for notification of declassification actions on transferred records, box labeling, and identification of exempt information in the records.

The OSY is required to submit an Agency Security Classification Management Program Data (SF 311), which is used to collect data from executive branch agencies that create and/or handle classified national security information. The report includes: the number of original classification authorities; number of original and derivatively classified decisions; number of mandatory declassification review requests and appeals; number of pages declassified; number of inspections conducted; and number of classification guides. The information is submitted to NARA's Information Security Oversight Office (ISOO), and is compiled, analyzed, reported, and published in ISOO's annual report to the President. The reports are available in printed format upon request or can be downloaded from the ISOO website.

Most documents are declassified based on their declassification date, or subject to Part 3 declassification, of E.O. 13526. All classified records that 1) are more than 25 years old, and 2) have been determined to have permanent historical value under Title 44 of the U.S. Code shall be automatically declassified whether or not the records have been reviewed, unless an exception to automatic declassification applies. To the extent practicable, operating units shall adopt a system of records management that will facilitate the public release

of documents at the time such documents are declassified based on the automatic declassification provisions of E.O. 13526.

The Department is a Non-Title 50 agency and has no public links or webpages where the public can learn about the agency's declassification program, and/or access declassified material.

# **Participation**

Participation is critical for the Department to achieve its strategic goals. The Department engages with the public and private sectors through a variety of ways and for a variety of reasons. For example, the BOUs actively use their websites, meetings, conferences, social media, Federal Register notices, public forums, focus groups, civic hackathons, and extensive outreach programs to ensure the public, private, and government participation is fulfilling the Department's mission.

There are around 60 <u>Federal Advisory Committees</u> in the Department that are established and operated in accordance with the requirements of the Federal Advisory Committee Act (FACA), which governs the creation and operation of Federal Advisory Committees (FACs). FACA was enacted in 1972 to ensure that advice by the various advisory committees formed over the years is objective and accessible to the public.

### **Collaboration**

The Department is continually working across the public/private sector (federal, state, local, tribal), and international government to build partnerships. The partnerships afford the development and sharing of best practices which initiate an environment for economic growth and opportunity. To achieve this goal, the use of collaboration tools, public meetings, and feedback efforts, such as website comments and social media are used to identify innovative ways to effectively collaborate.

The Department is continuing to accomplish these objectives by:

Including processes and best practices that improve and allow effective communication between the Department and the public sector, ensuring openness and transparency is part of all new programs and initiatives, as well as any updates initiated to existing programs and initiatives;

Maintaining a leadership role in the Open Government initiatives by building into the information lifecycle best practices that increase the value of information and tools made available to the American public;

Continuing to build and improve existing partnerships with the public and private sectors, which includes businesses, academia nonprofit organizations, and inter-governmental at federal, state, and local, to broaden input obtained for consideration during the regulatory process; and Improving the creation of new online tools and expanding existing tools and processes to enhance

public and private sectors' access to the Department's information and services and increase the understanding of funding opportunities.

# **Open Innovation Methods**

The Department is a leader in innovation. The Department is placing increased emphasis on the commercial opportunities of space exploration and aquaculture, while our scientists are conducting foundational research in areas ranging from artificial intelligence to quantum computing. The USPTO is working to improve the protection of IP so creators can profit from their inventions. Our BOUs continue to provide opportunities for employees, organizations, and communities in the private sector, nonprofit, and academic communities to develop ideas, technologies, products, and services.

The Department, through its strategic sourcing initiative, is streamlining the acquisition process for certain common goods and services (e.g., desktops, laptops, tablets, and software) and gaining volume discounts and better terms and conditions. In addition, as the acquisition of select common support requirements are strategically sourced, the Department benefits from reduced transactional burden, standardized processes, and economies of scale.

Departmental strategies to advance innovation include:

Promote research, applications, and standards for quantum computing;

Promote research, applications, and standards for artificial intelligence;

Enhance precision measurements and standards to drive innovation in advanced manufacturing; Strengthen the competitiveness of America's manufacturing base through technology development and deployment;

Lead the development of measurements and standards to facilitate digital commerce, wireless technologies, and autonomous vehicles;

Ensure spectrum is available for federal government and commercial services;

Promote effective sharing of spectrum for multiple uses;

Leverage unmanned systems, artificial intelligence, cloud computing, and 'omics (the use of advanced methods to analyze material such as deoxyribonucleic acid (DNA), ribonucleic acid (RNA), or proteins) to enable breakthrough science and technology (S&T) applications to help deliver the world's best weather forecasts and to grow the American bioeconomy; and, Identify new strategies for broadening participation in the innovation economy.

### Access to Scientific Data and Publications

BOUs conduct and sponsor research on a wide variety of topics, ranging from research on weather forecasts and earlier warning for natural disasters, to research on capital access for minority-owned businesses.

BOUs publish their research on their websites, as well as in research journals, and various research publication vehicles. Historically, only some BOUs, such as NIST, have research budgets that are above the \$100 million threshold established by OSTP. Those BOUs address this requirement, and their response, in their designated section.

# **Spending Information**

The Department recognizes the importance of transparency in spending. The Department uses the OMB-established <u>USAspending.gov</u> website to post contracts, grants, loans, and other types of spending across the BOUs. The data available on USAspending.gov are provided by the Federal Assistance Awards Data System (FAADS) and the Federal Procurement Data System (FPDS). The Department coordinates implementation of the Digital Accountability and Transparency Act of 2014 (DATA Act) across the BOUs.

# **Open Source Software**

The federal source code policy (M-16-21, Federal Source Code Policy: Achieving Efficiency, Transparency, and Innovation through Reusable and Open Source Software) requires the Department to ensure that new custom-developed federal source code be made broadly available for reuse across the Federal Government. An example of the Department using and contributing to open-source software is illustrated by NOAA. To date, NOAA's efforts have focused on creating a capability for broad sharing of code and content, consistent with the M-16-21 objectives and in the general spirit of collaboration and Open Government. In particular, NOAA has established an organization account with GitHub (@noaa.gov) and is in the process of piloting GitHub as a platform for sharing of code and content. In addition to the GitHub account and capability per se, we have also defined NOAA's use cases for GitHub and developed a draft NOAA policy that provides guidance for how to use GitHub. Also see the USPTO section of this Plan.

# **Flagship Initiatives**

Since the publication of our first Open Government Plan in 2010, the Department has included many outstanding high-profile projects and initiatives that utilize Open Government principles and techniques. In 2022, we highlight NIST's Research Data Framework, Census's My Community Explorer, and NOAA's Data Strategy as examples of our commitment to make the Department more transparent, participatory, and collaborative.

# **NIST: Research Data Framework (RDaF)**



NIST is leading the development of the Research Data Framework (RDaF) with involvement and input from national and international leaders in the broad research data stakeholder community. The overarching goal of the RDaF is to provide the stakeholder community with a structured approach to develop a customizable strategy for the management of research data.

# **Census: My Community Explorer**



My Community Explorer (MCE) is an interactive, map-based tool that highlights demographic and socioeconomic data. These data measure inequality and help inform data-based solutions. This tool is designed to help users identify underserved communities as directed by the <a href="President's Executive Order 13985">President's Executive Order 13985</a> on Diversity, Equity, Inclusion, and Accessibility in the Federal Workforce.

# **NOAA: Data Strategy**



The purpose of the NOAA Data Strategy is to dramatically accelerate the use of data across the agency and with other key partners, maximize openness and transparency, deliver on mission, and steward resources while protecting quality, integrity, security, privacy, and confidentiality.

# Ongoing Initiatives at the Bureaus and Operating Units (BOUs)

The Department has published high-value data as part of its scientific, technological, and economic programs. As a result, the Department has been able to establish best practices in the distribution and publication process to meet the needs of an ever-evolving public. The various Open Government initiatives within the BOUs are described in each of the BOU reports that follow.



# Office of the Secretary (OS)

Os is the general management arm of the Department and provides the principal support to the Secretary in formulating policy and in providing advice to the President. It provides program leadership for Commerce's functions and provides general supervision over the operating units. It also directly carries out program functions as may be assigned by the Secretary, and provides, as determined to be more economic or efficient, administrative, and other support services for designated operating units. Os consists of the Secretary, certain Secretarial Officers, designated staff immediately serving those officials, and several "Departmental offices" which have Department-wide functions or perform special program functions directly on behalf of the Secretary.

# **OS Open Government Initiatives**

The table below shows a list of initiatives for OS.

Table 2 - OS Initiatives

Operating Unit	Project	Status	Estimated Completion
Office of the Secretary	Office of Digital Engagement	Live / Operational	
	FOIAonline FOIA Request Management and Reporting	Live / Operational	
	Centralized FOIA Record Search Pilot	Completed	

### Project - Office of Digital Engagement

The Office of Digital Engagement focuses on outreach efforts, ensuring effective two-way communications with the public about the Department's services. The Office of Digital

Engagement launched a public beta version of the revision to Commerce.gov in 2018 to gather quantitative analytics and qualitative feedback from citizens on the design.

### Project – FOIA online FOIA Request Management and Reporting

Improved request capabilities that include standard request input, improved tracking and reporting.

<u>FOIAonline</u> provides a single interface through which the public can submit requests to the Department or directly to any BOU and provides full tracking and updates with electronic document management. In July 2018.



# Office of the Inspector General (OIG)

The OIG's mission is to improve the Department's programs and operations through independent and objective oversight, as provided in the Inspector General Act of 1978, as amended. As part of our mission, we conduct reviews that involve employees, management officials, and affected departmental programs and operations. The findings from our audits, evaluations, and inspections help the Department improve its programs and operations as well as prevent or detect fraud, waste, or abuse. In addition, the OIG is authorized to carry out investigations, which can include criminal, civil, and administrative matters.

OIG Open Government initiatives contribute to the Departmental Open Government plan by ensuring that the principles of transparency and collaboration are incorporated into OIG policies and operations. To ensure that these principles are adhered to, certain positions are designated with Open Government commitments and responsibilities. These include positions such as the OIG Records Officer, the OIG Freedom of Information Act (FOIA) Officer, and positions within the Office of the Chief Information Officer (OCIO).

Of note, the OIG supports transparency and collaboration by routinely posting announcements, significant correspondence, audit and evaluation products, and as appropriate, investigative content to the OIG's public-facing website: <a href="https://www.oig.doc.gov/Pages/default.aspx">https://www.oig.doc.gov/Pages/default.aspx</a>.

OIG personnel regularly review the website to ensure that content is easily accessible. In addition, the OIG uses the Department's FOIAonline system to process public requests for information, which enables the bureau to track FOIA requests, to improve coordination with stakeholders within the Department and with FOIA requesters, and to ensure timely responses to requests for records.

The OIG also supports Open Government activities by continuing to improve records management policies and processes and by reviewing OIG's records management schedules for accuracy. The OIG Records Officer conducts annual training for staff and updates an internal website to increase awareness of records management responsibilities.

# **Privacy**

The OIG OCIO continues to prepare compliance reports such as those required under FISMA. The OCIO actively participates in reviews of the Departmental Privacy Controls implementation approach in conjunction with the NIST. OIG continues to update standard operating procedures to improve the OIG network infrastructure and to meet Departmental requirements. The OIG Security Officer monitors and responds to incidents as needed. The OIG OCIO also improves security by implementing the administration's priority cybersecurity capabilities. These actions will assist in the protection of the personal information OIG maintains and improve services to OIG customers, both internal and external. The Office of Administration (OA) continues to provide security training to new employees during in-processing and annual computer-based training. Annually, the OIG reviews the OIG Privacy Impact Assessment to ensure compliance with departmental requirements. The PIA is also reviewed when a new information system is being designed for implementation on the network.

### Whistleblower Protection

In accordance with 5 U.S.C. § 2302(c), OIG informs individuals of their rights and remedies under the prohibited personnel practices and whistleblower retaliation protection provisions of Title 5. OIG's website includes a separate Whistleblower Protection Program page with information and links related to the Whistleblower Protection Act of 1989, as amended, OIG's Whistleblower Protection Coordinator, how to file whistleblower reprisal complaints, and whistleblower protection agency certification. The page includes the phone number and email contact information for the Whistleblower Protection Coordinator. The Coordinator's role is to educate agency employees about prohibitions on retaliation for protected disclosures and inform agency employees who have made or are contemplating making a protected disclosure about the rights and remedies against retaliation for protected disclosures. As part of the strategy to promote awareness, the Coordinator provides training sessions, posts informational posters at agency facilities, and develops brochures for employees as part of the orientation process. More https://www.oig.doc.gov/Pages/Whistleblower-Protectioninformation included here: Program.aspx.

### Websites

The OIG's website is accessible by a link on the Department's public-facing homepage and directly at <a href="https://www.oig.doc.gov/Pages/default.aspx">https://www.oig.doc.gov/Pages/default.aspx</a>. The website includes a menu at the top of the page, allowing visitors to readily access various topics of interest. The website provides access to downloadable PDFs of public audit and evaluation reports, audits initiated, correspondence, and Congressional testimony, as well as publicly available information on OIG investigative activities and other general information. The OIG maintains processes to ensure that all posted OIG products to its website are Section 508 compliant in order to make these materials accessible to individuals with disabilities, and the agency is working to ensure that the entire website is Section 508 compliant. The website includes a FOIA reading room, as well as information on how

to make a request for records. There is a "Contact Us" page to encourage communications from Commerce employees, members of the public, and the media. <a href="https://www.oig.doc.gov/pages/Contact-Us.aspx">https://www.oig.doc.gov/pages/Contact-Us.aspx</a>. The OIG periodically reviews the usability of its website by analyzing the results of workgroup studies and by being an active member of the Departmental Web Advisory Council.

### **Transparency**

The concept of transparency is established in OIG routine processes and policy. To keep Congress and the public informed about OIG activities, the OIG publishes a *Semi-Annual Report* to Congress twice yearly. The OIG also publishes an annual "Top Management Challenges" report to address what the OIG deems to be the most serious management and performance challenges facing the Department. The OIG also supports transparency regarding the operations of the office by posting to OIG's official Twitter and LinkedIn accounts.

### **Public Notice**

OIG uses its Twitter and LinkedIn accounts to publicize work products, activities, and job vacancies. Using these popular modes of communication helps support transparency, collaboration, and participation. OIG is increasing customer outreach to stakeholders, citizens, and the media as the number of its social media followers expands. The OIG will continue to use these communication methods to inform the public. The OIG website at <a href="https://www.oig.doc.gov/Pages/default.aspx">https://www.oig.doc.gov/Pages/default.aspx</a> is also used to provide the public with notice of recently released reports and other information and features a prominent "Recent Releases" section to highlight the most recently posted information.

# **Records Management**

An objective of the OIG Records Management Program is to improve records management processes by revising records management policies and OIG disposition processes. In April 2020 OIG's CAPSTONE plan for effectively managing email was approved by NARA. This program will meet the objective of capturing and storing appropriate emails for record keeping purposes. By improving the management of email records and by examining the records management policies, the OIG will improve customer service and serve the objectives of Open Government. The OIG will be continuing to improve records management policies.

The OIG Records Officer routinely participates in the Federal Records Officer Network, NARA's Electronic Records Management Automation Working Group/Microsoft 365 User Group, and Bimonthly Records and Information Discussion Group, and is the co-chair for the CRAG (Council of the Inspectors General on Integrity and Efficiency Records Administration Group). This activity supports the Open Government activity of collaboration. Further collaborative efforts by the OIG

Records Officer include speaking engagements in public forums to educate the general public on records retention and dissemination as well as sitting on the Educational Advisory Committee for Digital Government Institute Conferences. The Records Officer provides regularly scheduled training for OIG staff regarding records retention and availability to ensure records are maintained in accordance with NARA's directives.

### **Freedom of Information Act Requests**

The OIG operates a FOIA program that is primarily electronic based, to optimize efficiency in public access to OIG records and to reflect a presumption of openness and ease of access. Each FOIA request is entered into and tracked in the Department's FOIAonline system, and, as often as possible, responses are sent via email directly to requesters. The OIG website provides more information on the OIG FOIA program at <a href="https://www.oig.doc.gov/pages/Freedom-of-Information-Act.aspx">https://www.oig.doc.gov/pages/Freedom-of-Information-Act.aspx</a>. In addition to providing members of the public with information by way of responses to FOIA requests, the OIG proactively discloses items such as *Semi-Annual Reports* to Congress; audit, evaluation, and other reports; the OIG top management challenges report on issues facing the Department; congressional testimony, and information on current and planned activities. These materials are posted publicly at <a href="https://www.oig.doc.gov/Pages/default.aspx">https://www.oig.doc.gov/Pages/default.aspx</a>. To provide access to frequently requested records that were not otherwise publicly posted, the OIG maintains a FOIA electronic reading room here: <a href="https://www.oig.doc.gov/Pages/FOIA-Electronic-Reading-Room.aspx">https://www.oig.doc.gov/Pages/FOIA-Electronic-Reading-Room.aspx</a>.

### **Proactive Disclosures**

The OIG alerts the public to additions to the OIG's external website by posting notices of audits and evaluations initiated and recent releases in these sections on the OIG homepage and via Twitter and LinkedIn. The OIG will continue to review its website to improve customer communications. As noted above, the OIG FOIA Officer routinely reviews the subject matter of FOIA requests to identify frequently requested records for proactive posting.

# **Congressional Requests**

OIG's Senior Legislative and External Affairs Officer leads the OIG's process for triaging Congressional requests, which are typically received directly from Congressional member or committee offices. Upon receipt, the Senior Legislative and External Affairs Officer coordinates with the cognizant OIG leaders and offices to determine the appropriate dispensation and response. Products intended for external release undergo OIG's clearance process, and the final product is delivered to the requester by the Senior Legislative and External Affairs Officer, who also is responsible for coordinating briefings for Members and their staff.

### **Declassification**

The OIG follows the Department's "Manual of Security Policies and Procedures" for security of Commerce information. New employees receive briefings from the Department's Office of Security. The OIG does not have original classification authority.

# **Participation**

The OIG promotes public participation in its processes by encouraging reports of fraud, waste, and abuse on its public-facing website: <a href="https://www.oig.doc.gov/Pages/Hotline.aspx">https://www.oig.doc.gov/Pages/Hotline.aspx</a>. OIG officials also conduct outreach to various audiences to inform them of the OIG's role and responsibilities.

### Collaboration

The OIG will continue to utilize its Twitter and LinkedIn accounts as communication tools with members of the public and other stakeholders. The OIG also provides access to its hotline contact information on all of OIG's public-facing platforms. <a href="https://www.oig.doc.gov/Pages/Hotline.aspx">https://www.oig.doc.gov/Pages/Hotline.aspx</a>.

# **OIG Open Government Initiatives**

The table below shows a list of initiatives for OIG.

Table 3 - OIG Initiatives

Operating Unit	Project	Status	Estimated Completion
OIG	Continue to improve network infrastructure to ensure security of privacy information by analyzing and updating privacy controls	Ongoing/Continuous	
	Improve records management processes by revising records management policies and OIG disposition processes. In April 2020 OIG's CAPSTONE plan for effectively managing email was approved by NARA.	Ongoing/Continuous	

The OIG's OCIO is working to align with OMB's Zero Trust Strategy to modernize the federal government's cyber security posture to meet current threats, as outlined in Executive Order 14028. These actions will assist the protection of the personal information OIG maintains and improve services to external and internal customers. OIG continues to make use of the Department's leveraging of the DHS Continuous Diagnostics and Mitigation (CDM) program and completed implementation of bandwidth upgrade to all OIG regional offices. The OIG/OCIO continues to focus on utilizing more Cloud services to enhance the security, protection of CUI, PII, BII and availability of resources.



# **Bureau of Economic Analysis (BEA)**

**B**EA is one of the world's leading economic statistics agencies. BEA is charged with the production of some of the Nation's most closely watched economic indicators, influencing decisions made by government officials, businesses, and households. BEA's economic data, which provide a comprehensive, up-to-date picture of the U.S. economy, are key ingredients in critical decisions affecting monetary policy, tax and budget projections, and business investment. The cornerstone of BEA's statistics is the national income and product accounts (NIPAs), which feature estimates of GDP and related measures.

In 2000, the Department of Commerce recognized GDP as its greatest achievement in the 20th century, and GDP has been identified as one of the three most influential measures affecting U.S. financial markets. Since the NIPAs were first developed in the aftermath of the Great Depression, BEA has developed and extended its estimates to cover a wide range of economic activities and structural economic changes.

# **Primary BEA Activities**

Today, BEA prepares national, regional, industry, and international accounts that present essential information on such key issues as economic growth, regional economic development, interindustry relationships, and America's position in the world economy.

Transparency and openness have long been hallmarks of the Bureau. BEA publishes all data, research, and publications on its website <a href="www.bea.gov">www.bea.gov</a>, along with detailed methodology papers that explain how BEA computes the Nation's key economic indicators as well as its other economic data. The Bureau makes its subject matter experts directly available to the public, with names, phone numbers, and email addresses published online. Additionally, to ensure transparency, prior to implementing changes to presentations or methodologies, BEA announces and conducts outreach to stakeholders through webinars and other virtual sessions, in-person briefings, data workshops, conference calls, presentations at conferences, and social media to explain the changes and solicit input on the impact of the changes on data users. As a 2011 New York Times story notes, "The Bureau of Economic Analysis, an arm of the Commerce Department... emphasizes transparency and is uncommonly open to public questions."

The Bureau is continuously exploring ways to further increase openness and transparency regarding its processes and products and devotes substantial resources to educate the public about its data. In recent years, BEA has continued to add to or improve the data retrieval tools on the BEA website, making the Bureau's vast stores of data more accessible, consumable, and shareable.

### **Open Data**

BEA's mission is to promote a better understanding of the U.S. economy by providing the most timely, relevant, and accurate economic accounts data in an objective and cost-effective manner. Open data is central to this mission.

BEA's Open Data webpage provides access to BEA's downloadable datasets, online tools, and a public listing of all datasets currently available on the BEA website. This listing includes datasets from all economic program areas of the Bureau, and the various formats in which data are available including interactive web applications and flat, downloadable files.

BEA's website makes datasets available for download either as static files or via various interactive web applications, such as the <u>Interactive Data Tables</u>, <u>Industry Facts</u> tool, <u>BEA Regional Fact Sheet</u> tool and <u>Country Facts</u> tool. BEA's topic-driven website provides an intuitive user experience and information architecture centered on the Bureau's data products. Additionally, BEA publishes a blog and uses social media to further support its efforts to promote data releases, highlight new data offerings, provide insight into its data products, and deepen the public's understanding of the U.S. economy through BEA's economic statistics.

### **Proactive Disclosures**

As a data-producing agency, the Bureau proactively publishes or otherwise makes available all data, research, reports, and publications allowable under Federal law or regulation. BEA only restricts access to company confidential, embargoed, or other information protected by law.

# **Privacy**

BEA views privacy and confidentiality of data as paramount, particularly given the vital trust our mission demands from businesses that provide their confidential data to BEA. In addition to standard privacy and confidentiality protections in statute, BEA is also subject to the requirements of the Confidential Information Protection and Statistical Efficiency Act and the International Investment and Trade in Services Survey Act, both of which extend additional civil and criminal penalties for violations of confidentiality.

<u>Confidential Information Protection and Statistical Efficiency Act of 2002 (CIPSEA)</u> International Investment and Trade in Services Survey Act (Pub. L. 98-573) The <u>BEA Web Privacy Policy</u> page hosts links to DOC's Privacy Act and FOIA pages. BEA's website also features a section on <u>legal authority and confidentiality of international survey</u> collections.

### Whistleblower Protection

On May 15, 2002, President Bush signed legislation called the No FEAR Act (Notification and Federal Anti-Discrimination and Retaliation Act of 2002). This act, which took effect on October 1, 2003, makes federal agencies individually accountable for violations of anti-discrimination and whistleblower protection laws. See the <u>DOC No FEAR Act Policy</u>, which dictates BEA policy.

### Websites

BEA maintains one domain, <a href="www.bea.gov">www.bea.gov</a>. Through this website, BEA provides access to its data, information about the data and the methodology used to produce the data, research papers, the data release calendar, a blog, social media and multimedia resources, as well as an open data portal. Through the website, the public can reach out to customer service, public affairs officers, and economic subject matter experts with questions or to seek help assessing or understanding BEA's data.

The website complies with the Department's Policies and Best Practices. BEA's website provides a <u>Digital Government Strategy</u> link to make the public aware of these Commerce-wide policies. BEA has also incorporated the tracking code for <u>Analytics.USA.gov</u> within its website and does not restrict data capturing. This allows BEA web usage to be reported as part of the Department of Commerce analytics reported there.

# **Open Innovation Methods**

The Bureau's website features a <u>Developers page</u> with various tools to assist programmers and researchers. For programmers, the BEA's data API provides programmatic access to BEA published economic statistics using industry-standard methods and procedures. BEA's API includes methods for retrieving a subset of BEA's statistical data and descriptive meta-data to make it easier for developers to write programs using the data.

BEA also offers resources in R, described below in the open-source software section of this report.

These innovations simplify the use of BEA's data for those writing programs or conducting research and analysis, fostering innovation in these spheres. BEA has experts available to answer technical questions and questions about BEA's datasets.

### Access to Scientific Data and Publications

As a data producing agency, the Bureau proactively publishes or otherwise makes available all data, research, reports, and publications allowable under federal law or regulation. BEA only restricts access to company confidential, embargoed, or other information protected by law.

# **Open Source Software**

Because the open-source programming language R is widely used for statistical computing and graphics, BEA now offers two tools (available at <a href="https://github.com/us-bea/">https://github.com/us-bea/</a>) to make data more readily accessible using this software:

The bea.R library allows for economic data from BEA's API to be quickly accessed and used in R-friendly formats, requiring only a few lines of code to do so.

The eu.us.opendata R library provides users access to comparable datasets from the European Union (EU) and United States by tapping into both Eurostat's API and BEA's API.

# **Spending Information**

The Department of Commerce coordinates DATA Act implementation (including the reporting of spending information) at the department management level for smaller bureaus such as BEA.

# **Participation in Transparency Initiatives**

BEA participates in Data.gov, e-rulemaking, IT Dashboard, and USAspending.gov initiatives, and publishes all data allowable under statute. Further, BEA publishes extensive documentation on methodology and procedures, recognizing that the highest level of transparency is necessary to fulfill our mission.

### **Public Notice**

BEA's public website, bea.gov, is the main platform for sharing information, collecting feedback, and providing opportunities for participation and collaboration with the public. BEA also publishes documents, including public notices, in the Federal Register. Information is also provided to the public via social media channels.

Release dates and times for economic indicators produced by BEA are posted in advance on the agency's website. BEA's statistical news releases also carry the day and time of the upcoming release and the time period covered.

The <u>BEA Advisory Committee</u> advises the Director of BEA on matters related to the development and improvement of BEA's national, regional, and international economic accounts, especially in areas of new and rapidly growing economic activities arising from innovative and advancing

technologies, and provides recommendations from the perspectives of the economics profession, business, and government. Meeting dates are published in advance in the Federal Register. Meeting materials are published in advance on the BEA Advisory Committee webpage on BEA's public website.

Further, with respect to changes in schedules, methodologies or other pertinent information, BEA follows the requirements of OMB Statistical Policy Directives No. 3 and No.4, outlining public notices requirements and dissemination procedures for statistical products.

# **Records Management**

BEA's Administrative Services Division includes an Agency Records Officer who takes lead responsibility for ensuring BEA complies with all applicable record retention and archival regulations. BEA records are managed throughout their lifecycle. BEA complies with the Managing Government Records Directive (OMB M-12-18). BEA follows National Archives and Record Administration (NARA) Bulletin 2013-02: Guidance on a New Approach to Managing Email Records and uses an approved General Records Schedule (GRS) 6.1: Email Managed Under a Capstone Approach. All transactions between BEA and NARA are conducted through the Electronic Records Archive (ERA).

# **Freedom of Information Act Requests**

The Freedom of Information Act (FOIA) provides the public a means to access Federal agency records, except those excluded or protected under the Act. The <u>Submit FOIA Request</u> link on the <u>Contact Us</u> page of the BEA website connects the public to the Department's FOIA page. This page provides instructions on submitting requests either electronically through the Department's system or in paper form. Requests are coordinated by BEA's FOIA Officer. All BEA FOIA requests are reviewed and responded to as fully and promptly as allowed and directed by law.

# **Congressional Requests**

BEA works closely with the Department's Office of Legislative and Intergovernmental Affairs to collect, coordinate, and distribute timely and accurate information related to the Bureau's congressional relations and activities. Within the Bureau's Communications Division is a staff member designated as the Bureau's Congressional Affairs Officer. The BEA website's home page includes a link to <u>Information for Congressional Users</u>, which directs users to a page with the quick-access resources for commonly requested information and data.

The <u>Contact Us</u> page lists the name and contact information for BEA's Congressional Affairs Officer.

### **Declassification**

BEA does not have classification authority. BEA, however, does impose strict embargoes on public release of market-sensitive information until the specified date and time of release. Authority and procedures for data embargo are provided by OMB Statistical Policy Directives No. 3 and No. 4.

# **Public Participation**

BEA actively reaches out to data users, survey respondents, and other stakeholders at meetings, conferences, workshops, and briefings both in person and virtually through video conferencing. This outreach is vital to guiding the direction of BEA's programs, including its open data initiatives.

The <u>BEA Advisory Committee</u> advises the BEA Director on matters related to the development and improvement of BEA's national, regional, industry, and international economic accounts, especially in areas of new and rapidly growing economic activities arising from innovative and advancing technologies, and provides recommendations from the perspectives of the economics profession, business, and government. Meeting materials are posted in advance on BEA's website and meeting notices are published in advance in the Federal Register.

BEA also receives guidance and advice from the <u>Federal Economic Statistics Advisory Committee</u>. Meeting materials are posted in advance on BEA's public website and meeting notices are published in advance in the Federal Register. Information is also provided to the public via social media channels.

### Collaboration

BEA follows the Department's best practices for ensuring effective two-way communication with the public, ensuring openness and transparency.

BEA regularly cooperates with other Federal and non-Federal agencies, the public, and non-profit and private entities to fulfill its mission. BEA sources input data from a spectrum of public and private organizations. It coordinates closely with other Federal statistical agencies through the Interagency Council on Statistical Policy.

Additionally, the Bureau is an active participant and a representative of the United States to the United Nations Statistical Commission, the Organization for Economic Cooperation and Development, and appropriate working groups of the International Monetary Fund.

BEA also collaborates with the nation's research community. As part of its work producing international trade and investment statistics, BEA collects company-specific data that must be kept confidential by law. Outside researchers can apply to use BEA's company data for their statistical research, under strict guidelines. Those who are approved take an oath to safeguard the data as

special sworn research consultants of BEA. These data may be accessed by authorized researchers through a secure facility. BEA also makes its confidential, business data available through the Federal Statistical Research Data Centers located throughout the United States. Detailed information is available on BEA's public website. BEA is also involved in the Interagency Council on Statistical Policy's creation of a Standard Application Process (SAP) for researchers to apply for access to confidential business data, in accordance with the Foundations for Evidence-Based Policymaking Act.

# **BEA Open Government Initiatives**

The table below shows a list of initiatives for BEA:

Table 4 - BEA Initiatives

Operating Unit	Project	Status	Estimated Completion
BEA	Enhancing Communications through Web and Social Media	Ongoing / Continuous	
	New Data Products	Ongoing / Continuous	

# **Project - Enhancing Communications through Web and Social Media**

BEA continues to enhance its use of web and social media tools to make its data more accessible and useful for the public.

BEA also regularly monitors website-usage analytics and customer feedback to continuously improve the customer experience.

In addition to using its blog to educate members of the public about how they might use BEA data to better understand the dynamics of the U.S. economy, BEA also creates innovative video and multimedia content, data visualizations and infographics, and leverages social media channels to inform the public. BEA expanded its social media presence to Instagram in 2020 and to Facebook in 2022, allowing the agency to reach new audiences beyond its longtime Twitter presence.

# **Project - New Data Products**

BEA is developing new statistics as part of its ongoing effort to better measure the dynamic

U.S. economy and give businesses, policymakers, and households additional tools to make informed decisions. These initiatives are in addition to the Bureau's ongoing work to improve the quality, reliability, and timeliness of existing measures by, for example, refining seasonal adjustment methodologies and developing tools to better capture the economic effects of fast-changing technologies.

BEA continually explores the development of new statistics as part of its mission to provide Americans a timely, accurate, and in-depth understanding of the ever-evolving U.S. economy. BEA is working on innovations that will lead to expanded data in several areas.

Statistics that are new or under development include:

Outdoor Recreation Satellite Account – In 2021, BEA expanded upon statistics showing the role of outdoor recreation in the national economy by showing the role of outdoor recreation on each

state's economy. These statistics measure the size and growth of the outdoor recreation economy. They capture the economic effects of activities such as biking, boating, hiking, RVing, and skiing and show the extent to which industries like retail trade and manufacturing contribute to the outdoor recreation economy.

Marine Economy – BEA published its first official marine economy statistics in 2021, measuring the role of commercial fishing, shipbuilding, seaports, tourism, recreation, and the rest of the marine economy within the larger U.S. economy. The statistics cover activities off the U.S. coast in the Atlantic, Pacific, and Arctic oceans, as well as the Great Lakes, the Chesapeake Bay, and Puget Sound, and international seaports such as those in Portland, Oregon, and Baton Rouge, Louisiana. BEA is partnering with the National Oceanic and Atmospheric Administration (NOAA) on this project and examining the possibility of additional ocean statistics.

Space Economy – BEA is exploring the space economy – the size and contributions of space-related industries within the U.S. economy. This includes not just satellites and spacecraft but also telecommunications and navigation systems, research and development, observatories, education, even services such as insurance when they're related to space. In January 2022, the bureau issued an updated set of experimental statistics, including its first inflation- adjusted space statistics. BEA will continue research to improve measurement of space industries, subject to additional resources.

Digital Economy – BEA continues developing tools to better capture the effects of fast-changing technologies on the U.S. economy and on global supply chains. This project seeks to calculate the digital economy's contributions to gross domestic product, improve measures of high-tech goods and services, and offer a more complete picture of international trade.

Global Value Chains – BEA is developing new data about U.S. trade that will help analyze the increasingly complicated supply chains that link many countries together to produce a good or service. In the first milestone of this project, BEA released prototype data in December 2021 on trade in value added. These data complement traditional trade statistics by showing the domestic and imported sources of value used in producing U.S. exports. In 2022, BEA is exploring adding a more detailed breakdown of industries, especially those focused on research and development or information and communication technology.

*Income Distribution* - In 2020, BEA first published prototype statistics that measure how total U.S. personal income is distributed across households in different income groups over time. In December 2021, the data were extended to cover the years 2000 to 2019. BEA continues to expand and improve these prototype statistics to include disposable personal income, which is personal income after taxes. BEA will continue to refine the methodology and publish regular updates. Looking ahead, BEA plans to publish research on producing these statistics for each state, as well as research on the distribution of personal consumption expenditures (also known as consumer spending).

Small Business – To measure how small businesses are doing within the U.S. economy, BEA must define "small business" and find the necessary sources of data. BEA has published experimental statistics grouping businesses by number of employees and by receipts. The bureau continues its research into different size categories and other characteristics to define small business, as well as possibly using data from private sources to augment data from government agencies.

Pandemic: Consumer Spending – The COVID-19 pandemic brought dramatic and fast-moving changes to the economy, increasing the nation's need for timely data, updated frequently. As an early barometer of changes in spending, BEA is publishing estimates using payment card transactions data. Estimates of daily spending on select industry groups are updated approximately once a week on bea.gov. The data, based on transactions such as credit, debit, and gift card purchases, also provide an early read of spending that informs BEA's monthly and quarterly official estimates of spending on services. BEA continues to research uses of card transaction data.

Pandemic: Recovery – To better understand the economic effects of federal COVID-19 recovery programs, BEA is producing special data tables and other materials that show pandemic relief payments and programs within our official statistics. These include tables showing the effects of selected pandemic response programs on U.S. personal income, personal income in each state, and the federal government's receipts and expenditures.

Health Care Satellite Account – BEA's supplemental health care statistics are designed to improve analysis of spending trends and treatment prices. The Health Care Satellite Account measures how much Americans spend annually to treat more than 200 medical conditions, such as heart attacks and viral infections. The data supplement traditional BEA statistics that measure overall spending on health care goods and services. Researchers and policymakers can use the newer statistics to help assess value in health care. For example, some of the increased spending on a disease might reflect a new treatment or more people being treated. In January, BEA released 2019 data by medical condition. BEA plans to release 2020 data in early 2023.

Puerto Rico Economic Activity - The bureau released its first official annual Puerto Rico GDP estimates in September 2021, in both Spanish and English, using source data from the Puerto Rico government and federal agencies. BEA issued its second set of Puerto Rico statistics in 2022. BEA is working to release more timely Puerto Rico statistics and is conducting research to develop estimates of the island's gross national product (GNP). BEA also produces economic statistics on the territories of American Samoa, the Commonwealth of the Northern Mariana Islands, Guam, and the U.S. Virgin Islands.

*Economic Well-Being* - In 2020 BEA launched a new tool to show how existing economic data can be used to measure and analyze Americans' economic well-being. This project looks beyond GDP, which is primarily a measure of production and the economic health of the United States.



# **Bureau of Industry and Security (BIS)**

The Bureau of Industry and Security (BIS) supports the Department's Open Government Goals and Initiatives for 2022: Accelerate American Leadership, Enhance Job Creation, Strengthen U.S. Economic and National Security, Fulfill Constitutional Requirements and Support Economic Activity, and Deliver Customer-Centric Service Excellence. The Bureau's core mission is to advance U.S. national security, foreign policy, and economic objectives by ensuring an effective export control and treaty compliance system and promoting continued U.S. strategic technology leadership. The Department's Open Government Plan complements the BIS mission and will continue to strengthen internal and foreign partnerships. The BIS website can be found at: <a href="https://www.bis.doc.gov">https://www.bis.doc.gov</a>.

# **Primary BIS Activities**

BIS's primary activity is to identify and mitigate national security risks associated with the export, reexport, or transfer (in-country) of commodities, technology, and software through implementing the Export Administration Regulations (EAR). With the passage of the Export Control Reform Act of 2018, BIS also leads a regular, ongoing interagency process to identify and control the export of emerging and foundational technologies that are essential to the national security of the United States.

The Bureau evaluates and provides all-source information publicly available and government-privileged to the interagency export control community to inform adjudication of export control license applications. BIS promotes U.S. exports by preventing the diversion or misuse of items subject to the EAR abroad through end-use checks, outreach, and cooperation with foreign governments. The Bureau identifies potential violations of export control laws and regulations that jeopardize U.S. national security and foreign policy interests; searches, inspects, detains, and seizes items to prevent unauthorized exports; and conducts law enforcement investigations that could result in criminal and civil penalties, as well as preventive regulatory actions, thereby encouraging compliance with the EAR.

Following the enactment of the Foreign Investment Risk Review Modernization Act of 2018, the scope of the interagency Committee on Foreign Investment in the United States has grown significantly. As a critical contributor to the Commerce Department's participation, BIS conducts

comprehensive reviews of transactions and provides expert support during policy deliberations on complex cases to ensure that inward foreign direct investment does not threaten national security.

The Bureau advises industry and enforces the antiboycott provisions set out in the EAR which discourage, and in certain circumstances, prohibit U.S. companies from taking specific actions in support of an unsanctioned foreign boycott, including complying with certain requests to provide information about business relationships with a boycotted country or to refuse to do business with certain persons for boycott-related reasons.

BIS conducts Section 232 investigations under the authority of the Trade Expansion Act of 1962, as amended. The purpose of such investigations is to determine the effect of imports on the national security. Investigations may be initiated based on an application from an interested party, a request from the head of any department or agency or may be self-initiated by the Secretary of Commerce. The Secretary's report to the President, prepared within 270 days of initiation, focuses on whether the importation of the article in question is in such quantities or under such circumstances as to threaten to impair the national security. The President can concur or not with the Secretary's recommendations and take action to "adjust the imports of an article and its derivatives" or other non-trade related actions as deemed necessary. More detailed information can be found at: <a href="https://www.bis.doc.gov/index.php/documents/section-232-investigations/86-section-232-booklet/file">https://www.bis.doc.gov/index.php/documents/section-232-investigations/86-section-232-booklet/file</a>.

BIS ensures continued U.S. technology leadership in industries that are essential to national security such as the Federal Government's Defense Priorities and Allocations System (DPAS) and works diligently to ensure that the U.S. remains competitive in industry sectors and sub-sectors critical to national security. BIS also administers the industrial compliance provisions of arms control and disarmament treaties (e.g., Chemical Weapons Convention).

# **Open Data**

BIS makes a wide range of data and other reference materials available to the public via its website. The Office of Technology Evaluation (OTE) produces statistical reports from its analyses of available data from the Automated Export System (AES) and BIS license application system to identify trends in export and licensing, support the evaluation of the U.S. Export Control System, and inform policy decisions. Additional information can be found here on the Annual BIS License Authorization and Deemed Export Licensing on the BIS website at: <a href="https://www.bis.doc.gov">https://www.bis.doc.gov</a>.

## **Proactive Disclosures**

Information is released to the public on a continual basis through updates directly from the program offices and Frequently Asked Questions (FAQs) on the BIS webpages at <a href="www.bis.doc.gov">www.bis.doc.gov</a>. The webpages provide updates to the EAR with dropdown menus to address specific questions to export counselors; information for small and new-to-export companies; and links to the

Consolidated Screening List (CSL), which provides a list of parties for which the United States Government maintains restrictions on certain exports, reexports or transfers of items; the Exporter Portal, which provides "Everything you need to know about exporting," the BIS Newsroom, and Reporting Possible Violations.

In addition. BIS has endeavored to provide the public with substantial information about its activities in response to Russia's invasion of Ukraine by creating a dedicated resource page that provides press releases, FAQs, and other information important for the public: <a href="https://bis.doc.gov/index.php/policy-guidance/country-guidance/russia-belarus">https://bis.doc.gov/index.php/policy-guidance/country-guidance/russia-belarus</a>

BIS also maintains a verified Twitter account where it provides additional updates and information at @BISGov.

# **Privacy**

BIS is steadfast on safeguarding personal individual information (PII) as it coincides with the Bureau's foundational pillars, our trustworthiness to the public. As collectors of information on individuals (PII) and businesses (BII), BIS strives to be a leader in privacy practices and policies. The Bureau Chief Privacy Officer (BCPO) is assigned directly by the Department's Senior Agency Official for Privacy (SAOP) and takes on the responsibility with the Privacy Officer for ensuring that the bureau's privacy plan incorporates the implementation of information and privacy protections, including compliance with federal laws, regulations, and policies relating to information privacy. The Bureau Privacy Officer is also a member of the Privacy Council, chaired by the Department's Chief Privacy Officer and is comprised of one designated Privacy Officer representative from each bureau. The Privacy Council works together on behalf of the Department to ensure that they reflect the privacy goals, values, and policies that the Department advocates. The Bureau Privacy Officer works with the Privacy Council to further identify opportunities for strengthening the Department and Bureau privacy implementation. BIS Privacy Policy Program (doc.gov)

## Whistleblower Protection

BIS adheres to the Department's guidance regarding the Whistle Blower Protection Program. This program implements protections from unlawful reprisal for those who identify potential wrongdoing in their organizations. The U.S. Office of Special Counsel (OSC) certifies the OIG to conduct training and promotion of the provisions of the Civil Service Reform Act of 1978, Pub. L. No. 95-454, 92 Stat. 1111; Whistleblower Protection Act of 1989, Pub. L. No. 101-12, 103 Stat. 16; Whistleblower Protection Enhancement Act of 2012, Pub. L. No. 112-119, 126 Stat. 1465, and other related laws. DOC employees receive training upon onboarding and annually on the antidiscrimination and whistleblower protection laws. Both employees and other covered and protected employees may contact the Whistleblower Protection Coordinator at 202.482.1099 or at wpo@oig.doc.gov. Additional information be found can at https://www.oig.doc.gov/Pages/Whistleblower-Protection-Program.aspx.

## Websites – Internal

BIS's main public website at <a href="http://www.bis.doc.gov/">http://www.bis.doc.gov/</a> posts regular updates on information for the exporting community as well as other items of interest to the public dealing with BIS programs on a reoccurring basis.

Freedom of Information Act, Electronic FOIA - https://efoia.bis.doc.gov/

Simplified Network Application Process - Redesign (SNAP-R) -

https://snapr.bis.doc.gov/snapr/

System for Tracking Export License Applications (STELA) -

https://snapr.bis.doc.gov/stela/

Section 232 Exclusions - The Department has a webpage for information about the 232 exclusion process and for access to the 232 exclusion portal -

https://www.commerce.gov/page/section-232-investigations

## Websites – External Collaborative

The bureau relies heavily on the Office of the Federal Register and its library - <a href="https://www.federalregister.gov/">https://www.federalregister.gov/</a> for public notices, proposed rules, and system of records, and the Code of Federal Regulations for publication of regulations, such as the Export Administration Regulations (EAR).

The Department of State, Directorate of Defense Trade Controls - <a href="https://www.pmddtc.state.gov/?id=ddtc\_public\_portal\_homepage">https://www.pmddtc.state.gov/?id=ddtc\_public\_portal\_homepage</a> for the International Traffic in Arms Regulations ("ITAR," 22 CFR 120-130) and The United States Munitions List ("USML," part 121 of the ITAR).

The Census Bureau, Foreign Trade - <a href="https://www.census.gov/foreign-trade/regulations/index.html">https://www.census.gov/foreign-trade/regulations/index.html</a> for Foreign Trade Regulations.

The Bureau of Industry and Security represents the U.S. government in four multilateral export control regimes. They are:

The Wassenaar Arrangement (WA) - <a href="https://www.wassenaar.org/">https://www.wassenaar.org/</a> is one of four multilateral export control regimes in which the United States participates on Export Controls for Conventional Arms and Dual-Use Goods and Technologies.

The Australia Group –

https://www.dfat.gov.au/publications/minisite/theaustraliagroupnet/site/en/index.html which is made up of 42 countries and focuses on coordination of export controls in order to prevent the proliferation of chemical and biological weapons.

The Nuclear Suppliers Group – <a href="https://www.nuclearsuppliersgroup.org/en/">https://www.nuclearsuppliersgroup.org/en/</a> which is made up of 48 member countries and is focused on preventing the proliferation of nuclear weapons.

The Missile Technology Control Regime - <a href="https://mtcr.info/">https://mtcr.info/</a> which is made up of 35 member countries and focuses on preventing the proliferation of missile technologies. Organization for the Prohibition of Chemical Weapons - <a href="https://www.opcw.org/">https://www.opcw.org/</a> one of the agencies BIS works with to administer the industry compliance program for the Chemical Weapons Convention (CWC).

# **Ongoing Initiatives**

BIS training seminars provide an opportunity for the public to learn first-hand from experienced U.S. Government officials about export control policies, regulations, and procedures. BIS offers one- and two-day courses on the EAR as well as in-depth courses on special topics of interest to the exporting community. Instructors are experienced export administration and regulatory policy specialists, engineers, and enforcement personnel from BIS's Washington, DC, headquarters, field offices, and representatives from other U.S. Government agencies as appropriate.

BIS also offers an extensive library of online training modules and prerecorded webinars which provide access and study at the individual's convenience.

Ongoing initiatives, such as responses to proposed rule comments, BIS seminars, and training, are updated on the BIS webpage and available through emails to participants to keep the public abreast of any changes.

A schedule for seminars can also be found on the webpage at <a href="https://bis.doc.gov/index.php/compliance-a-training/current-seminar-schedule">https://bis.doc.gov/index.php/compliance-a-training/current-seminar-schedule</a>. There is also a link on this page to sign up for emails to include website and regulatory updates.

#### **Public Notice**

Upcoming events, such as conferences and workshops, as well as links to BIS and DOC social media pages (e.g., BIS YouTube page) are posted on the BIS website main page to keep the public informed of any upcoming changes within the organization and export regulations.

You can find the BIS Seminar Schedule at: <a href="https://bis.doc.gov/index.php/compliance-a-training/current-seminar-schedule">https://bis.doc.gov/index.php/compliance-a-training/current-seminar-schedule</a>.

You can also find the schedule of public meetings for BIS's Technical Advisory Committee's (TACs) at: <a href="https://tac.bis.doc.gov/index.php/28-technology-evaluation/449-tac-meeting-schedule-2021">https://tac.bis.doc.gov/index.php/28-technology-evaluation/449-tac-meeting-schedule-2021</a>.

# **Records Management**

BIS is in the process of updating all its records schedules and developing a Standard Operating Procedure Guidance (SOP) for the transfer of electronic records in accordance with M-19-21, Transition to Electronic Records. After December 31, 2022, the Federal Records Centers (FRCs) will no longer accept paper records. To support the transition to electronic records, BIS has identified record liaisons for each program office, who will support the BIS record custodians in ensuring that any "temporary" records are maintained on the BIS shared drive and assisting in the transfer of any "permanent" electronic records to the National Archives and Records Administration (NARA), based on the record schedule.

# Freedom of Information Act (FOIA) Requests

BIS FOIA program provides transparency concerning FOIA laws, policies, guidelines, and resources that allow any person the right to request access to records maintained within the Bureau. The BIS FOIA webpage <a href="https://efoia.bis.doc.gov/">https://efoia.bis.doc.gov/</a>, provides instructions on how to file, track and appeal a request. Upon receipt of a request, the FOIA team is required to respond to FOIA requests within 20 working days of receipt unless there are unusual circumstances such as: 1) requesting records from field facilities or other separate establishments. 2) examining voluminous records; and 3) the need for consultation with another component or Federal agency. Once any responsive records are located, they may be released publicly through the FOIAonline system at <a href="https://foiaonline.gov/foiaonline/action/public/home">https://foiaonline.gov/foiaonline/action/public/home</a>.

# **Congressional Requests**

BIS organization and organizational charts can be found on the BIS webpage under the "About" tab at <a href="https://bis.doc.gov/index.php/about-bis/organization">https://bis.doc.gov/index.php/about-bis/organization</a>. Direct responses to any Congressional requests for information are handled by the Bureau's Office of Congressional and Public Affairs, within the Office of the Under Secretary and Deputy Under Secretary. See the BIS organization chart at <a href="https://bis.doc.gov/index.php/documents/about-bis/692-bis-organization-chart/file">https://bis.doc.gov/index.php/documents/about-bis/692-bis-organization-chart/file</a>.

Congressional or Media inquiries can be provided directly to the Office of Congressional and Public Affairs (OCPA) via email at: OCPA@bis.doc.gov.

## **Declassification**

BIS follows the Mandatory Declassification Review (MDR) of the Department which supports access to information. This is similar to FOIA where the process allows individuals or an entity to request any Federal agency to review agency records for release. MDR is a route to the declassification and release of classified Department records under the terms of E.O. 13526. The process addresses requests for classified information for declassification, regardless of its age or origin. The agency on record for generating the original document is asked to review the content related to their mission. A Subject-Matter-Expert (SME) shall review the document to determine mission related content. The SME shall then evaluate the current impact of the mission related

content to determine if it may be declassified. The assigned SME shall coordinate with the Information Security Division once a declassification recommendation has been determined to add to the MDR package.

The Department Original Classification Authority (OCA) makes the final MDR decision. Prior to transferring any records to NARA, BIS consults with OSY and the Department's Records Management Officer to ensure that appropriate procedures are established for maintaining the integrity of the records and that NARA receives accurate information about operating unit declassification actions.

# Transparency, Participation & Collaboration

The public can find general information about BIS at <a href="www.bis.gov">www.bis.gov</a>, which includes current activities, historical records, speeches, and testimony from BIS senior management. The page has a list of Press Releases, notices published in the *Federal Register*, updates on the Section 232 Exclusions Portal, Publications, a link to the eFOIA page, reminders for reporting requirements and much more.

# **BIS Open Government Initiatives**

The table below shows a list of initiatives for BIS.

Table 5 - BIS Initiatives

Operating Unit	Project	Status	Estimated Completion
BIS	Website – New to Exporting?	Live / Operational	
	Ongoing Initiatives	Ongoing	

# Project - Website - New to Exporting

A "New to Exporting" page was added for the critical information new exporters need to know to comply with U.S. export controls. On this page, BIS also added guidance on Section 232 Exclusions, and a direct email link to reach BIS counselors who can help with the challenges small businesses face.

# **Project – Ongoing Initiatives**

Ongoing initiatives such as responses to proposed rule comments, and regulatory changes as published in the Federal Register, are updated on the webpage, and through emails to participants, to keep the public abreast of any changes.



# **Bureau of the Census (Census)**

The Census Bureau is the federal government's largest statistical agency and is dedicated to providing trusted, timely, and relevant statistical information about the nation's people, places, and economy. This information is critical for government programs and shapes important policy decisions that help improve the nation's social and economic conditions.

The work the Census Bureau does is based on values and guiding principles that move us forward as innovation pioneers; encourage us to operate with integrity, transparency, and accountability to stakeholders; and that promote respect for the workforce, respondents, and customers

Through its <u>mission</u>, the Census Bureau promotes the Open Government principles of transparency, participation, and collaboration, while protecting privacy and confidentiality.

# **Open Data**

The Census Bureau continually identifies and publishes datasets and APIs to data.gov in accordance with OMB Memorandum M-10-06, Executive Order 13642 on open data, and the overall principles outlined in the <u>Digital Government Strategy</u>. It regularly updates and adds information about datasets available for the API through the <u>Developer's Forum</u>. Census Bureau open data efforts are an extension of their work in open government and the digital government strategy, and support their efforts to engage with citizen developers to deliver better services to the American people. Census Bureau data dissemination objectives remain aligned with the principles of open data and the digital government strategy.

Consistent with the Foundations for Evidence-Based Policymaking Act of 2018 (Evidence Act), Census Bureau data continues to be a key national resource, serving as a fuel for entrepreneurship, innovation, scientific discovery, and commercial activity. The Census Bureau participates in data.gov and eRulemaking initiatives. Additionally, the Census Bureau publishes documents that describe input data, methodology, and process for the creation of population and housing unit estimates for various geographies. To provide data users and other interested individuals documentation of the methods used in the American Community Survey (ACS), in 2014 the Census Bureau released the Design and Methodology Report which contains descriptions of the basic design of the ACS as well as the details of the full set of methods and procedures.

The Census Bureau continues to make all their nonsensitive public datasets freely available in machine-readable formats so that they can be leveraged to improve the efficiency and transparency of their operations. Additionally, it has published a comprehensive data inventory.

The Census Bureau publishes much of its public data on their website (census.gov). Data.census.gov is the most recent platform designed to improve the customer experience by making data from across its demographic and economic program areas available from one centralized place. The Census Bureau listened to its customers' feedback for a more efficient way to get data and designed a platform driven by the data users. In phases of integration, this platform will be the search that takes over census.gov to allow users a single place to seamlessly access their public data and digital content.

The Census Bureau Center for Enterprise Dissemination Services and Consumer Information (CEDSCI) continues to release updates for use on <u>data.census.gov</u>. These activities align with their strategic objective to increase the visibility and utility of their products and services. The Census Bureau has focused on actions and measures going forward to further increase the visibility and utility of the Census Bureau's products.

Additionally, the Census Bureau continues to inventory internal datasets that are restricted and not available to the public through their Data Management System (DMS). This internal data includes their survey data, data from reimbursable surveys conducted for other agencies (sponsors), and administrative records (ADREC). Public information is inventoried in data.gov.

# Participation and Collaboration

The Census Bureau uses several technologies to promote opportunities for public participation in decision-making processes and improve collaboration. There are two chartered advisory committees: the Census Scientific Advisory Committee (CSAC), and the National Advisory Committee (NAC). Each committee has a Differential Privacy Working Group that provides recommendations on the implementation of differential privacy for the 2020 Census data products. Committee members represent the national demographics as well as specific fields of expertise and aid the Census Bureau with its mission and innovation goals. The committees provide sound feedback for their operations, programs, methodologies, technologies, outreach, and current and new developments. The Census Bureau strives to ensure transparency and openness in all the advisory committees' activities and proceedings. The public has access to the deliberations, along with time for commentary at all the proceedings, in person or in writing.

At the <u>Census Advisory Committee website</u>, the public can access standard operating procedures, charters, Federal Register notices, committee recommendations and Census Bureau responses, membership biographies and contact information, meeting materials, working group guidelines,

and other relevant documentation. The advisory committees' meetings are widely advertised and transmitted via YouTube channels.

The Census Bureau has engaged JASON, the American Statistical Association (ASA) Quality Indicators Task Force, and the Committee on National Statistics (CNSTAT) to provide an external assessment of the decennial census. JASON is an independent group of scientists and engineers with expertise in a variety of technical areas leveraged to preform studies for government sponsors. JASON members have already completed multiple studies for the Census Bureau, covering various aspects of the 2020 Census and other Census Bureau operations. Recent contributions include the review and analysis of disclosure avoidance implementation and 2020 Census data products planning. More information is available in "Formal Privacy Methods for the 2020 Census."

The ASA has long shown an interest in the decennial census, and it includes experts who know our work well. Before, during, and following every decennial census, we work closely with ASA on the research and development of the operational design of the census, and the production and analysis of the data. The ASA released the task force <u>report on the 2020 Census Analysis</u> in September 2021.

The Census Bureau is working with a group of experts identified by CNSTAT regarding Disclosure Avoidance System (DAS) development and recommendations for data product development for the 2020 Census.

These groups will tackle different aspects of assessing the Census Bureau's work. Their reports will advise the Census Bureau on operational improvements for current and future operations and will help the public understand how to evaluate the quality of the decennial census data and fitness-for-use of the data products.

In FY22, the Census Bureau replaced the survey sponsor meetings and survey sponsor newsletters with a quarterly sponsor information session to be more interactive on specific topics of interest. Additionally, there have been several forward-thinking actions and measures discussed to increase the collaboration with reimbursable sponsors.

Census Bureau data dissemination professionals and outreach staff are actively engaged in providing data workshops, webinars, seminars, and site visits with a wide variety of groups. These include tribal, state, and local governments; community-based organizations; small businesses; trade associations; rural community groups; inner city neighborhood associations; media organizations; national affiliates; and faith-based organizations.

The Census Bureau continues to improve their internal collaboration, across all levels of government, and with nonprofit organizations, businesses, and individuals in the private sector. For example, xD is an emerging technologies group at the Census Bureau that partners with federal

agencies and universities to improve the delivery of government services using artificial intelligence. For FYs 2021 and 2022, xD continues to use research-driven, practical approaches for delivering experimental AI solutions. Examples of their work include building open-source tools to identify and mitigate statistical bias in machine learning implementations, supporting misinformation detection in the 2020 Census, and exploring the future of survey data collection through artificial intelligence.

Consistent with M-11-07, the Census Bureau collaborated with internal and external stakeholders to streamline their Paper Reduction Act (PRA) process. The Census Bureau publishes notices informing the public of their collections of information and other activities in the Federal Register. The Census Bureau posts active and pending collections of information at https://www.reginfo.gov/public/.

The Census Bureau also continues to explore ways to make participation in their surveys easy. For example, the Census Bureau created the <u>Geographic Update Partnership Software (GUPS)</u> to assist its partners in the review and collection of geospatial data for the 2020 Census. The GUPS is free software available to over 40,000 tribal, state, and local governments, and it is critical for the acquisition of their partner's boundaries, streets, and addresses.

The Census Bureau is conducting the <u>Household Pulse Survey</u>, a 20-minute online survey that shows how the COVID-19 pandemic is impacting households across the country from a social and economic perspective. The Household Pulse Survey is a collaborative effort with 15 federal agencies that provides information that cannot be collected elsewhere. The survey's rapid turnaround time allows data from tens of thousands of households to be published faster than ever before. Survey links to respond are sent via text message and e-mail, which respondents can then conveniently complete on their smartphone, tablets, or computers. Reminders are also sent via text or e-mail.

The Census Bureau relies on public participation to produce high quality, relevant statistical information. Census Respondent Advocates represent the interests of respondents in Census Bureau surveys and censuses. This includes outreach and working with respondents, Congressional offices that have direct interaction with respondents, and other major stakeholders, as well as working to elevate an increased consideration of respondents' needs when they conduct their censuses and surveys.

Another way the Census Bureau promotes participation is during National Sunshine Week. The annual Sunshine Week events offer an opportunity for dialogue on the importance of open government and transparency. Sessions offered during the event highlight all plan components described in M-16-16.

The Census Bureau continues to identify ways to work more collaboratively and develop partnerships both within and outside of the Census Bureau. They foster partnerships with tribal, state, and local governments as well as commercial partners.

Here are a just few examples of their ongoing collaborative efforts:

#### External:

## Standard Application Process (SAP)

The Foundations for Evidence-Based Policymaking Act of 2018 (hereafter, the Evidence Act) requires the director of the OMB to establish a standard application process (SAP) through which agencies; the Congressional Budget Office; state, local, and tribal governments; researchers; and other individuals may, for the purposes of developing evidence, apply to access certain data assets accessed or acquired by statistical agencies or units (44 U.S.C. § 3583(a)). This policy establishes a SAP that incorporates the requirements of the Evidence Act and will standardize the process by which those individuals or entities may apply to access available confidential data assets accessed or acquired by statistical agencies and units. Qualified users will experience a simpler process to identify and apply for access to restricted use data in a "one-stop-shop."

## American Indian and Alaska Native Programs

The Census Bureau has one program, the Boundary and Annexation Survey (BAS) with tribal governments, designed to collect and maintain a current inventory of all legally defined tribal lands, their boundaries, and status. In January 2016, the Census Bureau and the Bureau of Indian Affairs signed an agreement in support of the BAS.

## Redistricting Data Program

As required by Public Law 94-171 (P.L. 94-171), the Redistricting Data Program (RDP) provides states the opportunity to define small geographic areas for which they wish to receive decennial population totals for the purpose of reapportionment and redistricting. State legislative leadership in each of the 50 states, the District of Columbia (DC), and the Commonwealth of Puerto Rico (PR) appoint one or more nonpartisan liaisons, who, along with their designees, serve as the primary contacts between the Census Bureau and the states for participation in the RDP.

## The Opportunity Project

The Opportunity Project (TOP) catalyzes the creation of new digital tools that use federal and local data to provide families, local leaders, and businesses with information about critical resources, such as jobs, affordable housing, quality schools, and transportation. By providing easy access to curated federal and local datasets, and facilitating collaboration between technologists, issue

experts, and local leaders, TOP is transforming government data into digital tools that create more thriving communities and help people solve problems in their everyday lives.

## Federal Statistical Research Data Centers

There are currently 31 open Federal Statistical Research Data Center (FSRDC) locations. The FSRDCs partner with more than 70 research organizations including universities, non-profit research institutions, and government agencies. The FSRDCs provide qualified researchers on approved projects with a secure connection to restricted data collected by the Census Bureau, the National Center for Health Statistics, the Bureau of Economic Analysis, National Center for Science and Engineering Statistics, the Agency for Healthcare Quality and Research, the Bureau of Labor Statistics, and other federal agencies.

Though there are 31 locations available for use across the country, not all potential FSRDC researchers have easy access to a facility. To address barriers to physical access and increase the use of federal statistical data for research and evaluation purposes, the FSRDC program has designed a pilot project to test the risks and benefits of providing remote access to its centralized computing environment. Since its launching, more than 160 researchers have successfully used remote access to FSRDCs; reports from the field indicate that researchers continue to successfully complete their research.

## Disclosure Avoidance for the 2020 Census Data Products

Protecting the privacy of our respondents and the confidentiality of their data is both a legal obligation and a core component of our institutional culture. Modern computers and today's datarich world have rendered the Census Bureau's traditional confidentiality protection methods increasingly insufficient at preventing hackers from piecing together the identities of the people and businesses behind our published data. The Census Bureau is being proactive in response to recent developments in mathematics and computer science that have significantly increased the vulnerability of our published data products to reconstruction and re-identification attacks. A powerful new disclosure avoidance system (DAS) designed to withstand modern reidentification threats will protect 2020 Census data products (other than the apportionment data; those state-level totals remain unaltered by statistical noise). The 2020 DAS is based on a framework for assessing disclosure risk known as differential privacy. It is the only solution that can respond to this threat while maximizing the availability and utility of published census data.

The Census Bureau has been open and transparent with the public about the implementation of this new methodology. We've been educating our stakeholders every step of the way about what differential privacy is, why we've adopted it, and how implementation of the 2020 DAS works. This includes presentations at professional conferences and meetings; conducting listening sessions with federal, state, tribal, local officials, and other stakeholder groups; and releasing

videos, blogs, newsletters, technical papers, an introductory handbook, and an online webinar series.

Ongoing engagement with our data users will continue to be essential as we modernize the privacy protections for the 2020 Census data products. To facilitate these efforts, the public is being provided with demonstration data to assess, their feedback is reviewed, and then additional data are provided for further evaluation, in an iterative cycle.

The Census Bureau released demonstration data from the <u>first "beta" version</u> of the DAS in October 2019, and has since released several additional demonstration data products. During this process, independent experts and stakeholders, along with data users, have provided extensive feedback to help shape each subsequent test product and to inform the decisions. Visit the <u>2020</u> <u>Decennial Census: Disclosure Avoidance site, "Developing the DAS"</u> for additional information.

## Civic Hackathons

The Census Bureau continues to participate in hackathons to challenge civic hackers, programmers, and developers to apply multiple open datasets to address economic, social and sustainability challenges.

# Border Interagency Executive Council (BIEC)

The Census Bureau continues to work with the BIEC, an interagency working group established by Executive Order 13659, Streamlining the Export/Import Process for America's Businesses. The BIEC is comprised of over 40 federal agencies that are involved in the export/import process, from trade facilitation to trade enforcement.

## Electronic Export Manifest Project

The Census Bureau has been working closely with the U.S. Customs and Border Protection (CBP) to help prepare for the implementation of Electronic Export Manifest (EEM). The EEM team is comprised of subject matter experts covering a wide spectrum of the International Trade Program at the Census Bureau and is looking specifically into how newly acquired administrative data, available in the EEM, should improve the export trade statistics the Census Bureau publishes. As part of the initial research, we have found that six data elements span all the Methods of Transportation for the EEM and could have correlation with the Electronic Export Information (EEI) transportation data. Those elements include: Method of Transportation, District/ Port of Export, Date of Export, Vessel Name, Carrier SCAC/ IATA, and Foreign Port of Unlading. The EEM team conducts monthly analysis on the use of transportation statistics from operational manifest records provided from CBP. Initial findings from the analysis are showing improvement to currently published data for the collected transportation statistics. The EEM team continues to work with CBP's advisory committees (CESAC and COAC) and CBP to ensure the Census Bureau is engaged in how export operations for the 21st century are conducted.

# Other Agencies and Organizations

The Census Bureau participates with other agencies in the Interagency Council on Statistical Policy (ICSP) and the Federal Committee on Statistical Methods (FCSM) to assess the needs for new approaches to improve the content, production, confidentiality protection, and dissemination of official statistics.

The Census Bureau engages universities, think tanks, and international statistical agencies to assess the needs for new approaches to improve the content, production, confidentiality protection, and dissemination of official statistics. In FY21, the Census Bureau continued to participate in the pilot for the Standard Application Process (SAP) while also participating in an interagency team to plan for the expanded SAP to include a full application and enhanced functionality.

The Census Bureau engages with the DOC Office of Inspector General and the Government Accountability Office (GAO) to receive and address reviews for procedural or programmatic improvements.

#### Internal:

Census Bureau employees use Microsoft Teams to collaborate in real time. Microsoft Teams allows employees to share documents during a chat session, schedule online meetings, and collaborate within Microsoft Office applications.

The Census Bureau has more than 1200 SharePoint team sites that are used for division, branch, or project level information and collaboration daily.

The Census Bureau uses the SharePoint web content and document managing system as a tool to increase their options for collaboration. For example, SharePoint is used to manage all Interagency and Other Special Agreements (IOSAs).

The Census Bureau has a <u>Transparency in Secondary Research policy</u> that encourages staff to look for ways to improve visibility into these secondary uses of data they collect.

# **Open Innovation Methods**

Open innovation methods such as incentive prizes on challenge.gov, citizen science programs, and other crowdsourcing approaches are designed to obtain ideas from, and to increase collaboration with, those in the private sector, non-profit organizations, and academic communities.

Each year, the Census Bureau participates in the National Day of Civic Hacking. This national event engages citizens to use open government data, code, and technology to discover one or many solutions to community issues. Civic hackers can be programmers, designers, data scientists, communicators, civic organizers, entrepreneurs, government employees, or anyone who wants to collaborate to solve problems that affect the community.

Additionally, the Census Bureau hosts a Vizathon concept competition, wherein Census Bureau staff can generate and submit ideas around data visualizations. On the day of the event, each team presents their data visualizations to a panel of internal and external judges, with awards given to the best visualizations. The goal of Vizathon is to improve employees' abilities to make Census Bureau statistics easier to consume and digest, expand the understanding of the latest types of visualizations and tools used to create them, and help encourage Census Bureau staff to develop data visualization skills.

## **Access to Scientific Data and Publications**

The Census Bureau stays current by making research the basis of everything they do. <u>Their researchers</u> explore innovative ways to conduct surveys, increase respondent participation, reduce costs, and improve accuracy. The Census Bureau analyzes the data they collect and uncover trends that give us a deeper understanding of their complex society.

# **Open Source Software**

The Census Bureau has an open source policy that encourages the use, development, and release of open source software (OSS). The Census Bureau makes extensive use of OSS and libraries. There are 306 active open source products currently approved for use at the Census Bureau. This includes 259 "pure" open source product versions, and 47 paid open source product versions that are supported by a commercial vendor such as Red Hat Enterprise Linux. These 306 products comprise 15.6 percent of all software products approved for use at the Census Bureau.

The Opportunity Project is unleashing the power of data and technology to expand economic opportunity in communities nationwide. The Census Bureau is creating tools that help families, local leaders, and businesses access information about the resources they need to succeed with a focus on making government data accessible.

# **Spending Information**

The Census Bureau, through <u>USAspending.gov</u>, provides budgetary and financial information to give taxpayers increased visibility and accountability for activities. Part of the Census Bureau's mission is a commitment to conduct its work openly. The taxpayer and other stakeholders will be able to analyze actual expenditures against cost estimates for major operations such as the 2020 Census, the 2017 Economic Census, and the 2017 Census of Governments. Furthermore, taxpayers and stakeholders can search how much is spent on contracts in their state. The information includes contract data that includes the name of the vendor, type of contract, award dates, amounts awarded, and the state in which the place of performance occurs.

From the perspective of internal management and decision-making, an objective in the Census Bureau' Strategic Plan is for executive staff to make critical program funding decisions and understand the distribution of costs across business functions. In furtherance of that objective, the Census Bureau management and staff will have a one-stop shop for quarterly financial information that was previously in multiple databases. For instance, in a user-friendly interface, acquisition personnel will be able to access and analyze historical trends in contract dollars that would otherwise have required a special request from another division at the Census Bureau. Furthermore, program managers will be able to quickly obtain data on spending in their program areas to identify historical trends in five-year cyclical censuses—as funding levels rise and fall—and to plan in anticipation of needs. The financial data is available by object classes that categorize how the Census Bureau spends its budget: personnel, information technology, contract services, training, travel, and infrastructure. As such, the ease of access to this reliable web-based tool will contribute to the efficiency and effectiveness of the Census Bureau as an agency.

The Census Bureau will also align its Information Technology (IT) spending to the industry standard Technology Business Management (TBM) Taxonomy. TBM is a reporting mechanism by OMB as part of the reporting associated with the IT business plans and Exhibit 300s. Budgeting and obligating IT funds by the TBM Taxonomy will allow the Census Bureau to be completely transparent and more effectively communicate to stakeholders the services that our IT investments support. This information is publicly available at <a href="https://www.ITdashboard.gov">www.ITdashboard.gov</a>.

# **Privacy**

The Census Bureau remains committed to the principles of transparency and openness while also meeting their responsibilities to privacy compliance. They place stringent requirements on the collection, access, use, dissemination, storage, and destruction of personally identifiable information (PII). The Census Bureau requires annual data stewardship training that covers IT security awareness, Title 13, Title 26, and Privacy Act responsibilities to reinforce their confidentiality and privacy standards. In addition to the annual FISMA compliance reports, the Census Bureau submits PII breach incident reports to the Department of Commerce's Office of Privacy and Open Government (DOC OPOG) and meets monthly with the Government Accountability Office (GAO) to discuss the development of new privacy policies. The Census Bureau also provides periodic reports to federal agencies, and afford physical and IT security reviews where requested, on the applications, protections, integrity, and disposition of data they have provided them.

The Census Bureau makes information regarding their privacy program readily available to the public. The information can be accessed at the following links:

Data Protection and Privacy
Online Privacy Policy
Privacy Impact Assessments
System of Records Notices

# Oath of Non-Disclosure Statistical Safeguards

Additionally, 15 CFR, Part 4, Subpart B, of the Privacy Act governs how an individual <u>can request</u> access to and <u>amend their records</u>. The Census Bureau makes submitting a request transparent and easy by providing information and instructions at <u>census.gov</u>.

Annually, the Census Bureau hosts a Privacy Day event to promote awareness and discussion of current data protection topics, privacy policy, and to generate ideas to help evolve the current policies. The event offers a variety of workshops about important Privacy Act and E-Government Act requirements, as well as tools available for protecting their customers' privacy.

# **Whistleblower Protection**

The Census Bureau strictly adheres to all antidiscrimination and whistleblower requirements by ensuring all employees complete the mandatory training. The Census Bureau is fully compliant with the No FEAR Act Policy. Additionally, information provided by the Office of Special Counsel can be accessed from their Equal Employment Opportunity Office intranet page under the "Whistleblower Protection" section. Broadcast messages are sent annually from the Census Bureau director to all employees informing them of their rights and remedies. The e-mail includes links to information on additional whistleblower protections; where all employees and contractors should report fraud, waste, and abuse to; and the online complaint form.

# Websites

The Census Bureau continues to take significant steps towards making their data and information more accessible to the public through <u>data.census.gov</u>. Data.census.gov is a platform that represents a new and improved customer experience by centralizing data access and allowing for a more rapid response to customers. It also creates new opportunities for data visualizations, maps, and other data displays that data users need. Data users now have more choices and greater flexibility. As data users search, they will be making direct calls to the data, metadata, and geospatial services. More information and details on initiatives, such as the application programming interface that support the data.census.gov platform for data access, is found in Census Bureau Open Government initiatives following Table 6.

The Census Bureau continues to create avenues for public participation by soliciting public input and feedback on their website. The vision for data.census.gov stems from overwhelming feedback that they received to simplify the way customers get their data. The Census Bureau continuously works on the customer experience so that it is not necessary for data users to know special terminology or perform a complicated search to find the data that they need. The Census Bureau will continue to work towards integrating data.census.gov with the main Census Bureau webpage, census.gov, to create a seamless data user experience where data are accessible using a single

search bar.

Additionally, the 2020 Census program launched a campaign website that featured resources and materials to help inform the public about the census. The site included Statistics in Schools materials, a webpage to share facts about the 2020 Census, information on applying for jobs, and FAQs. The Statistics in Schools material included classroom activities, updated classroom maps with census statistics, and videos for students. The <u>site</u> has been decommissioned and the content is now incorporated within the census.gov website.

In early 2018, the Census Bureau replaced its longer customer satisfaction (CSAT) survey with a much easier mechanism to get specific feedback for each page on the site. Users can now simply click a thumbs up or thumbs down symbol to indicate if a page was helpful or not. There is then further opportunity to provide specific comments or questions as a follow up to the quick rating. The Census Bureau also uses Adobe Analytics to measure actions taken by all users (not just the subgroup who respond to the survey) to assess search results, numbers of pages visited, most popular content, paths taken to reach the desired content, etc. The Census Bureau cross-references this with the results from other sources for a more complete look at user behavior to inform site improvements.

Throughout the Census Bureau website, they make downloadable data files available to the public. These include data from the <u>American Community Survey (ACS)</u> and the <u>Economic Census</u>. Their website enables the public to <u>explore their data</u> in a variety of ways.

The Census Bureau continues to support and upgrade <u>Census Business Builder (CBB)</u>. CBB is a suite of services that provide selected demographic and economic data tailored to users in a simple access and format. The data are presented in a map-based interface that includes a wide range of data, including:

Demographic, socioeconomic, and housing data from the ACS;

Business data from County Business Patterns, Nonemployer Statistics, and Economic Census;

Import and export data from the International Trade program;

Workforce data from the Quarterly Workforce Indicators;

Building permits data from the Building Permits Survey;

Consumer spending data from Esri;

Farms data from the U.S. Department of Agriculture, National Agricultural Statistics Service Census of Agriculture; and,

Employment and related data from the Bureau of Labor Statistics Quarterly Census of Employment and Wages.

In response to the COVID-19 pandemic, the Census Bureau developed the COVID-19 Data Hub,

an interactive platform that provides easy access to over 300 economic and demographic variables that are critical for federal agencies, businesses and communities to make decisions and understand the impacts of the pandemic. This intuitive tool presents information in interactive dashboards, policy maps, and downloadable resources for decision makers to make data driven decisions every day. First released in April 2020, the COVID-19 Data Hub provided relevant Census Bureau economic and demographic datasets. As of January 2021, the Census Bureau has expanded the number of datasets to include over 40 datasets from 18 federal and private sector data providers for a more robust customer experience.

In addition to the COVID-19 Data Hub, the Census Bureau provides <u>further resources</u>, including new products like the weekly Household Pulse Small Business Pulse Surveys, weekly Business Formation Statistics, and the Community Resilience Estimates.

The Census Bureau's publicly available datasets and tools can assist federal agencies and other entities in the equitable distribution of resources and identifying underserved communities. They have released a <u>curated collection of data sets and tools</u> that can be used to inform the frameworks for public dashboards to share progress and program metrics for assistance programs.

## **Public Notice**

Census.gov remains their main platform for sharing information, collecting feedback, and providing opportunities for participation and collaboration with the public. The Census Bureau publishes documents, including all public notices, in the Federal Register:

## **External:**

Crowdsourcing and idea-generating tools;

Federal Register Notices;

Social media (Facebook, YouTube, Twitter, blogs, etc.);

Electronic newsletters:

Webinars and webcasts:

Video and slide presentations;

National conferences and other speaking engagements;

Census advisory committees;

International Trade virtual town halls;

Stakeholder meetings;

Focus groups and surveys; and,

Various data tools and applications.

#### **Internal:**

Internally, the Census Bureau uses their intranet as a platform for keeping Census Bureau employees informed and engaging them in Open Government ideas and initiatives. The main page, "Census Central," shows the latest news releases, webinars, articles in the news media, announcements, events, and more. Here are some of the other tools currently in use:

Electronic technology repository for collaboration;

Director's and deputy director's messages (e-mail, video, audio);

Broadcast messages;

Conference phone calls, internal chat services, and video teleconferences;

Training;

Presentations and workshops for upper management;

Presentations for the regional offices;

Town hall meetings with employees;

Resources to employee development and publication of web content;

Reports and dashboards in support of organizational goals and objectives;

Employee newsletter;

Focus groups; and,

Surveys.

Consistent with the Open Government Directive, the Census Bureau continues to keep the public informed about its significant activities and business. To provide access to a wider audience of stakeholders, the Census Bureau hosts public webinars to discuss the latest 2020 Census data processing developments and data products. Making these meetings available live and archived to all stakeholders (not just those who can) is providing unprecedented opportunities for everyone to learn about 2020 Census details. Along these lines, the <u>Agility in Action</u> report provides the public with updates on how the Census Bureau is working to minimize burden for American Community Survey respondents, while still allowing the survey to be responsive to emergent issues, keeping content current, and maintaining high quality data.

# **Records Management**

Records are the foundation of open government, supporting the principles of transparency, participation, and collaboration. Well-managed records can be used to assess the impact of programs, to improve business processes, and to share knowledge across the government. Records protect the rights and interests of people and hold officials accountable for their actions. Permanent records document our nation's history.

The Census Bureau continues to move forward with implementing an e-mail records management system (ERMS) that will be compliant with federal records capabilities necessary to capture all inbound and outbound e-mail, social media content, and electronic documents, and will store these records using the cloud for storage. The ERMS project will also incorporate the Capstone approach NARA Bulletin 2013-03 for managing e-mail. The Census Bureau initiated the ERMS project to

address the Records Management solution for their e-mail and internal social media communications as mandated by OMB Executive Order M-19-21, Transition to Electronic Environment. The project also includes support services required to transition, deploy, operate, maintain, safeguard, and manage an enterprise-wide e-mail and collaboration environment, and to fulfill the Managing Government Records Directive.

Additionally, the ERMS initiative aligns with the Census Bureau's strategic plan of Implementing Electronic Reporting and Administrative Tools. This initiative utilizes electronic instruments such as SharePoint, eOPF, Transit Benefit Program, and the Decennial Applicant, Personnel and Payroll system to reduce the need for paper, printing requirements, ample storage, maintenance, and retrieval of records by fully leveraging the capabilities of their electronic systems. The initiative will follow the Capstone guidance provided by NARA and the Department, which references the Presidential Memorandum on Managing Government Records signed on November 28, 2011, and the subsequent issuance of the Management Government Records Directive memorandum signed on August 24, 2012, by OMB and NARA. The requirement does away with the traditional print-and-file policies and requires agencies to implement new approaches to manage their documents electronically.

The Census Bureau has been working with NARA on the archiving of 2020 Census records and NARA's release of 1950 Census individual records (April 1, 2022). NARA has digitized the 1950 Census population schedules, enumeration district maps, and enumeration district descriptions and provides free <u>online access</u> to the public. These records have proven useful for genealogical research and other historical purposes.

Although records management under M-16-16 focuses on the agency internal records management processes, the Census Bureau also contemplates how its information is managed externally. The Census Bureau's WikiData project takes a proactive approach to ensure that the public gets the most up-to-date data and information. WikiData powers data and statistics within Wikipedia. The project consists of the development of a system that will connect the Census Bureau API to WikiData and create an opportunity for dynamic, automatically updated Wikipedia articles. Through community engagement with Wikipedia editors, and the development of software tools that allow for synchronization of data, the Census Bureau will work to ensure that Wikipedia presents the latest Census Bureau information.

# **Freedom of Information Act Requests**

In accordance with the Open Government Directive and the Freedom of Information Improvement Act of 2016, the Census Bureau operates under a presumption of openness, sharing information with the public about their programs and projects.

The ability for customers to know who to contact for help or service, and how to contact those individuals remains important to the Census Bureau. The Census Bureau provides contact

information their FOIA staff for on their public website http://www.census.gov/about/policies/foia/contact.html. Included on this page are the names and contact information for the chief FOIA officer and the FOIA public liaison. The Census Bureau also has a resources page where customers can find a listing of FOIA laws, regulations, and policies, along with links to those documents. Additionally, on the same resources page, there is a guide named the "United States Census Bureau Freedom of Information Reference Guide," which has more detailed information about the FOIA and how the Census Bureau's FOIA staff processes requests.

Continuing their focus on the customer, the Census Bureau has implemented a promotion campaign to expand the awareness of the FOIA both internally and externally. The campaign consists of enhancing the FOIA internal and public facing websites to include a blog page that will house videos on topics related to FOIA. The goal is to utilize more technology that is interactive to increase awareness and education on the FOIA.

The Census Bureau's FOIA staff continues to review established FOIA business processes for best practices. FOIA staff recently worked collaboratively with the Department of Commerce and the Department of Justice on FOIA trainings for internal and external customers. FOIA staff conduct regular case audits to ensure FOIA professionals are following established FOIA laws, regulations, policies, guidance, and procedures. The audits help with both program compliance and to establish staff training needs.

Information about FOIA requests submitted to and fulfilled by Census Bureau FOIA professionals are available to everyone with access to the internet through <u>FOIAonline</u>. The FOIAonline system continues to allow the Census Bureau to provide better case management, audit, and tracking capabilities for both the Census Bureau and the requester community. Detailed information about their FOIA program is available at the <u>Census Bureau FOIA landing page</u>.

## **Proactive Disclosures**

The Census Bureau continues to post frequently asked requests in the <u>Freedom of Information Act</u> <u>electronic library</u>. Consistent with the FOIA Improvement Act of 2016, the Census Bureau continues to take steps toward ensuring openness and transparency by systematically posting material of interest (including 2020 Census information) immediately. The Census Bureau uses <u>FOIAonline</u> as their main tool for managing, tracking, and assessing records fit for public disclosure. <u>FOIAonline</u> system allows the Census Bureau to collaborate with agency staff outside of the FOIA office by allowing:

Departmental FOIA staff to review, task, or assign Census Bureau FOIA cases; Staff to refer misdirected FOIA cases to other DOC BOUs; and

Staff to send consultation requests to other agencies that use **FOIAonline**.

As part of a regular process, the Census Bureau FOIA staff reviews FOIAonline to decide whether or not records requested have been requested in the past. If the records have been previously requested, they are considered "Frequently Requested" and made available to the public through FOIAonline.

The following are links to posted material:

http://www.census.gov/topics.html

http://www.census.gov/about/policies/foia/foia\_library/congressional\_correspondence\_logs.html

http://www.census.gov/about/policies/foia/foia library/policies.html

http://www.census.gov/about/policies/foia/foia library/custom tabulations.html

# **Congressional Requests**

The Census Bureau receives congressional inquiries by phone, letter, and via the internet. The inquiries generally involve constituent-related survey issues, program policies, or requests for program or agency information. More recent inquiries have focused on the legal basis for taking the census, and how census results were affected by natural disasters and the COVID-19 pandemic. The Office of Congressional and Intergovernmental Affairs (OCIA) advises the Census Bureau's director, senior executive staff, and program areas on correspondence management and congressional, intergovernmental, and tribal affairs. OCIA also advises Congress and tribal and intergovernmental associations on Census Bureau programs and policies, and is responsible for responding to Census Bureau data inquiries from Congress. Congressional correspondence logs are processed through the FOIA office and proactively disclosed at the Census Bureau's FOIA landing page.

## **Declassification**

The Census Bureau does not have statutory authority to classify or declassify information.

# **Census Bureau Open Government Initiatives**

Table 6 shows a list of initiatives for the Census Bureau.

Table 6 - Census Bureau Initiatives

Operating Unit	Project	Status	Estimated Completion
Census Bureau	Innovation and Operational Efficiency	Live/Operational	

Operating Unit	Project	Status	Estimated Completion
	Add High Value Datasets to Data.gov	Live/Operational	
	2020 Census Data Products	Live/Operational	
	2020 Census Data Quality	Live/Operational	
	2020 Post-Enumeration Survey	Live/Operational	
	2020 Census Evaluations and Experiments	Live/Operational	
	Improving LED Data Visualization	Ongoing/Continuous	
	Application Programming Interface	Live/Operational	
	Implementing the Federal Digital Strategy	Live/Operational	
	Increasing Support for American Community Survey Data Users	Ongoing/Continuous	
	Agility in Action – A New Research Agenda to Enhance the ACS	Ongoing/Continuous	
	Improving Demographic Mapping Tools	Ongoing/Continuous	
	Census Flows Mapper	Live/Operational	
	TIGERWeb	Live/Operational	
	Live Webcasting	Live/ Operational	
	QuickFacts	Live/Operational	
	Census Geocoder	Live/Operational	
	Response Outreach Area Mapper (ROAM)	Live/Operational	
	Map Applications (viewers) for 2020 Census Operations:  Type of Enumeration Area Mail Contact Strategies In-Field Address Canvassing Registered LUCA 2020 Participants LUCA Respondents New Construction Program – Registered Entities Participant Statistical Areas Program (PSAP) Registered Participants (Primary PSAP Participant)	Completed	
	Map Viewer in Support of the Committee on Foreign Investment in the United States	Live/Operational	

Operating Unit	Project	Status	Estimated Completion
	Address Count Listing Files Viewer	Live/Operational	
	Map Viewer in Support of the 2020 Census P.L. 94-171 Redistricting Data Summary Files Release	Live/Operational	
	2020 Census Memorandum Series	Live/Operational	
	Creating a More User-Friendly Interface for Business Survey Respondents	Live/Operational	
	Accelerating Economic Indicators	Live/Operational	
	Construction Modernization	Live/Operational	
	Making Economic Indicators More Accessible	Live/Operational	
	Webinar Series	Live/Operational	
	The Opportunity Project	Live/Operational	
	Federal Advisory Committees	Ongoing/Continuous	
	Sunshine Week Event	Ongoing/Continuous	
	Privacy Day Event	Ongoing/Continuous	

# Project - Innovation and Operational Efficiency

The Census Bureau implemented the Innovation and Operational Efficiency (IOE) program in 2010 to engage employees in identifying opportunities to increase efficiency and reduce cost in Census Bureau operations. With over 4000 ideas submitted since 2010, project managers and their teams work to bring the ideas to fruition. The IOE program continues to succeed in fostering innovation and empowering employees to submit ideas that turn organizational challenges into solutions.

To date the IOE Program has achieved over 46 million in savings and cost avoidance for the Census Bureau.

## Project - Add High Value Datasets to Data.gov

The Census Bureau is publishing current datasets to <u>data.gov</u> as identified on a flow basis. Previously published records for Census Bureau products are reviewed regularly for date of last update and link validation.

## Project – 2020 Census Data Products

The apportionment results and redistricting data are now available on the <u>About 2020 Census Data Products</u> page. Apportionment is the process of dividing the 435 seats in the U.S. House of Representatives among the 50 states. The redistricting data may be used by the governors, officers, or public bodies having responsibility for dividing up districts within each of the 50 states. With the next set of 2020 Census data products the Census Bureau is moving deliberately to ensure that they can produce the high-quality statistics that the public expects. The pandemic delayed their operations, and they're in the midst of implementing new confidentiality protections.

## Project – 2020 Post-Enumeration Survey

The primary goal of the <u>2020 Post-Enumeration Survey</u> (PES) program was to measure coverage error in the 2020 Census such that this information could be used to improve the coverage of future censuses. Fieldwork for the 2020 PES began in January 2020 and ended in February 2022. The first release provides estimates of population coverage overall and for important demographic groups for the nation. The second release provides estimates of population coverage for states and by some census operations, as well as for coverage of housing units.

## Project – 2020 Census Evaluations and Experiments

The <u>2020 Census Evaluations and Experiments</u> program is a culmination of seven decades of expertise and experience in developing a comprehensive research program to evaluate how well census operations reflect the Census Bureau's strict quality standards. The program is designed to document and evaluate the current decennial census and facilitate planning efforts for the next one. The program consists of three experiments, 14 evaluations, 50 operational assessments, and five quality control results reports.

## Project - Improving Local Employment Dynamics (LED) Data Visualization

Data visualization tools are an important and necessary means by which statistical information can be made more understandable to data users. The Census Bureau's Longitudinal Economic Development (LED) partnership (or Longitudinal Employer-Household Dynamics (LEHD) program) has pioneered this effort with its public-facing *OnTheMap* web application that allows graphical analysis of the relationship between residence and workplace locations on user-defined maps. Version 6.8.1 of the OnTheMap application was released in December 2020. This latest version of OnTheMap includes the newest release of LODES (LODES Version 7.5), which adds data for 2019 and backfills 2018 data for firm age and firm size characteristic. OnTheMap now contains 18 years of data (2002–2019). The underlying geography associated with the data has been updated to the TIGER 2019 vintage.

In February 2021, the Census Bureau released version 4.6 of On The Map for Emergency Management. First introduced in 2010, this is a public data tool that provides unique, real-time

information on the workforce for U.S. areas affected by hurricanes, floods, wildfires, winter storms, and for federal disaster declaration areas. The most recent release includes 2018 LEHD Origin-Destination Employment Statistics (LODES) data and 2015–2019 ACS, 5-year estimates.

Additional applications include QWI Explorer, a tool for analysis of the Quarterly Workforce Indicators (QWI); J2J Explorer, a tool for analysis of the Job-to-Job (J2J) Flow statistics; PSEO Explorer, a tool to examine Post-Secondary Employment Outcomes (PSEO); VEO Explorer, a tool to access the Veteran Employment Outcomes (VEO) statistics; and the LED Extraction Tool, a tool that enables access to the raw public-use data of the QWI dataset.

QWI Explorer allows data users to explore and analyze measures of employment, job creation, earnings, worker turnover, and hires/separations by different levels of geography, industry, business characteristics, and worker demographics as well as to construct visualizations (charts, maps, and tables) comparing, ranking, and aggregating indicators across time, geography, or firm and worker characteristics.

Version 1.01 of <u>J2J Explorer</u> was released in September 2020 and provides access to metropolitan area tabulations and earnings indicators, as well as rankings and data normalization functionality. The update provides access to the most recent J2J data, new earnings indicators for comparisons, and various bug fixes.

The Post-Secondary Employment Outcomes (PSEO) Explorer visualization tool was released in November 2019. <u>PSEO Explorer</u> includes interactive modules for users to visualize <u>earnings</u> <u>outcomes</u> and <u>employment flows</u> for recent graduates of partner colleges and universities. <u>PSEO</u> is an experimental data product generated by linking graduate transcript records to LEHD data on graduates of select post-secondary institutions in the United States.

<u>VEO Explorer</u> allows similar functionality for a dataset on employment outcomes for U.S. Army veterans and was released in May 2020. These tabulations show earnings and employment outcomes for U.S. Army veterans who completed their initial term of active-duty service. VEO are generated by linking veteran records provided by the U.S. Army to national administrative data on jobs at the Census Bureau. Coverage includes Army veterans' labor market outcomes 1, 5, and 10 years after discharge, by military occupation, rank, demographics (age, sex, race, ethnicity, education), industry, and geography of employment. VEO Explorer allows for comparisons of veteran's outcomes via an easy-to-use line and bar chart interface.

## Project - Application Programming Interface (API)

Many of their datasets are available via API. The API lets developers customize Census Bureau statistics into web or mobile apps that provides users quick and easy access from more than 60 popular sets of statistics including:

ACS 1-Year Data\* (2005–2020)

Population Estimates and Projections (2010–2021)

Planning Database (2015, 2016, 2018–2021)

County Business Patters and Nonemployer Statistics (1986–2019)

Economic Indicators (Time Series: various years to present)

Decennial Census Self-Response Rates (2010–2020)

2020 Census P.L. 94-171 Redistricting Data Summary Files (2000, 2010, 2020)

And many more . . .

Note: The Census Bureau did not release its standard 2020 ACS, 1-year estimates because of the impacts of the COVID-19 pandemic. Instead, the Census Bureau released experimental estimates from the 1-year data. They are posted on the 2020 ACS 1-Year Experimental Data Release page; they are not available on the API or data.census.gov.

The API aligns with the federal digital strategy and supports the goals of Open Government by making Census Bureau data available in an information-centric and machine-readable format.

# Project - Implementing the Federal Digital Strategy

The Census Bureau continues to work diligently towards a 21st century digital ecosystem. They continue to support the digital government strategy (DGS) through their APIs, in the migration to an "information-centric" content management system (CMS), and by improving search and navigation for their website visitors. The Census Bureau also continues their efforts through increased engagement with the customer through a broad variety of channels (both online and offline) in line with the "customer-centric" tenets of the DGS.

The Census Bureau's implementation of the DGS is based on the fundamental tenet that information is a strategic public asset that must be managed through the complete lifecycle from data collection to data dissemination. The Census Bureau will continue to evolve their digital strategy to ensure openness and application interoperability through shared services, and to address heightened awareness of the challenge of maintaining security standards and infrastructure for the growing variety of digital efforts being planned.

There are three foundational elements critical to the success of a future Digital Strategy at the Census Bureau.

Interoperable systems - Improving how their systems exchange data with one another;

Mobile flexibility - Strengthening IT infrastructure through modern, scalable tools, and software; and

API by default policy CIO - Publishing consistent standards to enable reuse and savings.

# Project - Increasing Support for American Community Survey (ACS) Data Users

Every year, the Census Bureau releases 1- and 5-year <u>ACS</u> data products. Both products are accompanied by a webinar and news release. Additional products that use ACS estimates are released throughout the year, such as working papers, infographics, data visualizations, and others.

The Outreach and Education Branch (OEB) within the American Community Survey Office (ACSO) provides continuous support to ACS data users by answering data user questions via email and phone calls, holding educational webinars, and presenting and exhibiting at events across the country to provide information on the ACS and the various tools and resources available to assist data users in accessing and using ACS data. Every other year, the ACS program hosts a Data Users Conference to increase understanding of the value and utility of ACS data, and to promote information sharing among data users about key ACS data issues and applications. Since 2019, the OEB partnered with the Economic Directorate to develop and conduct a series of webinars (centered on specific topics) showcasing data from both the Census Bureau's economic programs and the ACS. The OEB also released a series of data user handbooks, tailored to the needs of specific data users, that help users understand and use ACS data.

## Project - Agility in Action - A New Research Agenda to Enhance the ACS

The Census Bureau continues to engage in numerous activities to build and maintain customer support and awareness of (and trust in) the ACS. Largely focused on providing a positive experience for customers, the Census Bureau continues to work to minimize burden for survey respondents while still allowing the survey to be responsive to emergent issues, keeping content current, and maintaining the high quality of data that their country demands and deserves.

The Census Bureau is committed to demonstrating a high degree of transparency and agility by constantly searching for ways to improve. In recent years, the Census Bureau has:

Made changes to ACS survey operations that reduced respondent burden;

Engaged in several communications efforts to educate the public about the impact of ACS data on communities throughout the United States;

Conducted numerous ACS research projects and published over 50 papers on their findings;

Mined the best thinking of subject matter experts in private industry and the National Academy of Sciences;

Evaluated sources for administrative records and conducted direct replacement tests on the ACS; and

Collaborated with respondent advocates to champion the needs and concerns of respondents everywhere.

The Census Bureau accomplished this while ensuring steady operations in engaging 3.5 million households a year with the ACS. This engagement includes providing customer service, encouraging people to fill out the survey, gathering and analyzing the data, and generating multiple data products along with 11 billion estimates free for public consumption.

The Census Bureau's deep and abiding commitment to quality drives them to create a positive survey experience, deliver high quality data, and conduct research to make data-driven decisions that enhance the ACS. They continually evolve survey operations to balance the needs of individual respondents with the need for impactful data in communities throughout the United States.

The Census Bureau remains agile in launching new research and experimentation with survey protocols while still meeting the multitiered demands of survey operations. The Census Bureau is building on exhaustive research that covers survey protocols ranging from mail packaging to contact modes to public education campaigns and beyond. In the years to come, the Census Bureau will keep improving by using a multi-pronged approach, focusing on:

Improving survey materials and the way questions are asked;

Reducing follow-up contacts;

Obtaining data from other sources; and

Removing questions or asking questions less frequently.

The Census Bureau will continue to do their part to stay agile and pursue every way to improve the respondent experience and enhance the ACS over time.

## Project - Improving Demographic Mapping Tools

This project is intended to improve and expand access to demographic survey content via enhanced mapping tool capabilities. Mapping tools for various surveys and programs have already launched while others are in development. Among these are mapping tools for metropolitan/micropolitan geographic areas, language use, small area income and poverty estimates (SAIPE), small area health insurance estimates (SAHIE), international population estimates, and the HIV/AIDS Surveillance database. There are continuous additions, enhancements, and integration with other data access methods such as table lookup and visual charting using a standardized framework that reduces one-time customization for each survey or program. New and modern user interface releases were completed for <u>SAIPE</u>, <u>SAHIE</u>, and the International Database.

## Project - Census Flows Mapper

The Census Flows Mapper is an interactive online mapping and data dissemination tool that provides access to county-to-county migration data from the ACS. The tool substantially expands access to, and understanding of, the number and characteristics of county-to-county migrants. Prior to development of the Census Flows Mapper, the complex county-to-county migration datasets generally were accessible only to expert data users and migration analysts. The Census Flows Mapper provides novice users with the ability to access and utilize complex county-to-county migration data that previously were beyond reach; experienced migration analysts can use the tool for exploratory analysis before delving deeper into the dataset.

The Census Flows Mapper's functionality makes it easy to visualize patterns of migration, as well as to produce multiple maps quickly to compare migration patterns for different counties. The ability to download data for a specific county and flows of interest allows the user the benefit of data tailored to their own analytical needs. The design of the map and the data download also provides information to their users that might otherwise be lost due to disclosure avoidance methodology when providing flow information by detailed characteristics. Having access to the full list of counties involved in any flow interaction with a selected county, and the ability to see spatial proximity by characteristic, even without the details, provides a wealth of information for both the experienced and novice user.

## Project - <u>TigerWeb</u>

TigerWeb has made it easier and more efficient for users to access and view the full range of census geographic areas and features contained within the TIGER database - the Census Bureau geographic database. Previously, TIGER data were available only as downloadable files for use in a Geographic Information System (GIS). Customers who lacked access to a GIS could only view census geographic area information on reference maps produced to support specific statistical data releases. To view boundaries and other information for the full range of geographic areas for which the Census Bureau tabulates data, a data user would have to access multiple reference map types and series. TigerWeb's online map viewer utilizes standard functionality to provide easy and open access to all census geographic areas, boundaries, relationships, and attributes. TigerWeb Web Mapping Service (WMS) and Representational State Transfer (REST) services have made it more efficient for developers to access and consume spatial data for use in their own GIS applications.

## Project - Live Webcasting Public Events

In order to provide greater public access to information about their major programs and activities, the Census Bureau continues to live broadcast a variety of events. In the lead-up to the 2020 Census, these included the 2020 Census Program Management Review meetings from 2015 to 2019. Live broadcasts have included news briefings, technical webinars, and meetings with the Census Scientific Advisory Committee and National Advisory Committee on Racial, Ethnic, and

<u>Other Populations</u>. The latest Census Bureau news is available on the <u>Newsroom</u> page and the Census Bureau YouTube site.

## Project - 2020 Decennial Census Operational Plan

The Census Bureau published the <u>2020 Decennial Census Operational Plan</u> that covered all operations required to execute the decennial census. Four versions of the 2020 Census Operational Plan were released prior to the 2020 Census. Each version reflected and supported evidence-based decision-making by describing design concepts and their rationale, identifying decisions still to be made, and outlining remaining significant issues and risks related to the implementation of the Operational Plan.

A final version of the 2020 Census Operational Plan that reflects the as-performed state of operations was released in January 2022.

The Census Bureau continues, through FY 2022, to release Detailed Operational Plans for each of the operations for the 2020 Census in the 2020 Census Memo Series on www.census.gov. Each operation of the 2020 Census describes detailed operational designs required to execute the 2020 Census. These Detailed Operational Plans complement the 2020 Census Operational Plan, thus providing the public and other stakeholders the opportunity to review a breakdown of the Census Bureau's detailed plans.

Each document describes the objectives and procedures for all aspects of each individual 2020 Census operation. The first of the series, 2020 Census Detailed Operational Plan for the Address Canvassing Operation, was released to the public in December 2015. Prior to the 2020 Census, detailed operational plans were updated as needed to reflect changes in strategies that resulted from census planning, research, and testing activities. In addition, as needed, Detailed Operational Plan Update documents or updated Detailed Operational Plans were released after the 2020 Census to communicate the as-performed versions of the operations, as well as provide final design documentation for archival purposes and 2030 Census planning. These documents are also in the 2020 Census Memo Series.

### Project - QuickFacts

QuickFacts continues to be one of the most popular and widely used tools on census.gov. The original vision of this tool has not changed—in one or two clicks, customers of all skill levels get to profiles showing data from across programs. The agency has introduced a completely reimagined QuickFacts. The interactive QuickFacts has several exciting improvements, including customized tables that let users compare statistics for up to six locations side-by-side. Users can also view data on a map instead of a table. Additionally, to continue growing the agency's customer base, users can also now embed QuickFacts on their websites and share it in social media. For the first time, QuickFacts now includes profiles for townships and locations in

Puerto Rico. The QuickFacts tool was also loaded with data from the 2020 Census P.L. 94-171 Redistricting Data Summary Files alongside the release of the legacy format in August of 2021.

The Census Bureau regularly monitors customer feedback and has made improvements to the search by ZIP Code, table display, data browsing feature, data download feature, and much more.

## Project - Census Geocoder

Launched in 2014, the <u>Census Geocoder</u> provides web services for geocoding addresses nationwide. The geocoder uses the publicly available <u>TIGER/Line</u> data as its data repository and makes it available for on-demand geocoding.

The geocoder is an address look-up tool that converts your address to an approximate coordinate and returns information about the address range. The geocoder is freely available to all government agencies, as well as the public. The tool allows you to look-up a single address or batch submit up to 10,000 addresses at a time.

## Project - Response Outreach Area Mapper

The <u>Response Outreach Area Mapper (ROAM)</u> application was developed to make it easier to identify hard-to-survey areas and to provide a socioeconomic and demographic characteristic profile of these areas using ACS estimates in the planning database. ROAM helps communities tailor their outreach efforts that encourage residents to mail in their census forms. The application launched in February 2018.

## Project - Map Applications (Viewers) for 2020 Census Operations

The Census Bureau released interactive map applications (viewers) that make data about 2020 Census operations more accessible to the public. The Type of Enumeration Area Viewer showed how households in various geographic areas were invited to respond to the 2020 Census, whether by self-response or by a method that requires a visit from a local Census Bureau worker. For self-response areas, the Mail Contact Strategies Viewer helped communities plan for the mailings that their area received for the 2020 Census. The In-Field Address Canvassing Viewer gave the public information about geographic areas that Census Bureau workers had to review during an in-person assessment rather than account for from imagery in the office. In the decade leading up to the 2020 Census, the Census Bureau completed a review of 65 percent of the nation's addresses in the office, resulting in significant cost avoidance for the 2020 Census. The Local Update of Census Addresses and New Construction Program viewers showed the level of government for an area participating in the programs and providing information to improve the Census Bureau address list. The Participant Statistical Areas Program viewer showed governments and organizations assisting in defining local data tabulation areas.

## Project – Map Viewer in Support of the Committee on Foreign Investment in the United States

The Geography Division worked with the Treasury Department and the Department of Defense (DoD) to create a map viewer in support of the Committee on Foreign Investment in the United States (CFIUS). CFIUS is an interagency committee authorized to review certain transactions involving foreign investment in the United States to determine effects on national security. CFIUS issued new regulations on February 13, 2020. The map viewer will allow members of the public to enter an address and determine whether their proposed real estate transactions are subject to CFIUS jurisdiction. The map displays geographies such as: urbanized areas and urban clusters provided by Geography Division and based on the 2010 Census, county boundaries provided by Geography Division, and military installations provided by the DoD. More information is available at <a href="https://home.treasury.gov/policy-issues/international/the-committee-on-foreign-investment-in-the-united-states-cfius/cfius-real-estate-instructions-part-802">https://home.treasury.gov/policy-issues/international/the-committee-on-foreign-investment-in-the-united-states-cfius/cfius-real-estate-instructions-part-802</a>.

## Project - Address Count Listing Files Viewer

The Geography Division released the Address Count Listing Files viewer which supplements the Address Count Listing files with an interactive map of the same information. The viewer also includes AREA LAND and AREA WATER (in square meters). The map viewer includes total housing units (including transitory units), and total group quarters counts, by 2020 Census tabulation block. These housing unit and group quarters counts represent final counts for the 2020 Census.

# Project - Map Viewer in Support of the 2020 Census P.L. 94-171 Redistricting Data Summary Files Release

The Geography Division worked with the Census Redistricting and Voting Rights Data Office and the Demographics Directorate to create a map viewer to support the release of the P.L. 94-171 Redistricting Data Summary Files. These files were initially published in a format that requires additional processing to extract familiar tables of interest. This map viewer allowed data users to access the same data for a subset of high-profile geographies (tracts, counties, townships, states) and data points without having to conduct that additional processing.

### Project - 2020 Census Memorandum Series

The 2020 Census Memorandum Series document significant decisions, actions, and accomplishments of the 2020 Census Program for the purpose of informing stakeholders, coordinating interdivisional efforts, and documenting important historical changes.

A memorandum was generally added to this series for any decision or documentation that met the following criteria:

A major program level decision that affected the overall design or had significant effect on the 2020 Census operations or systems.

A major policy decision or change that affected the overall design or significantly impact the 2020 Census operations or systems.

A report that documented the research and testing for the 2020 Census operations or systems.

For the latest releases, please visit <a href="https://www.census.gov/programs-surveys/decennial-census/decade/2020/planning-management/plan/memo-series.html">https://www.census.gov/programs-surveys/decennial-census/decade/2020/planning-management/plan/memo-series.html</a>.

## Project - Creating a More User-Friendly Interface for Business Survey Respondents

Census Bureau business survey respondents will utilize a new interface, the Respondent Portal, when submitting responses electronically. The new system allows respondents to access self-service options, send and receive secure e-mail, and single-sign on to the internet reporting tool through one centralized portal with one set of credentials.

Previously, respondents were mailed different usernames and passwords for each economic survey for which they were selected. Then, they had to enter the credentials separately to access self-service options (requesting time extensions and viewing filing status), send secure e-mail, or report electronically. Managing separate passwords and navigating through multiple logins was cumbersome for respondents and provided the Census Bureau with security challenges surrounding the storage and usage of passwords. The new e-correspondence system provides better customer service to respondents by reducing logins and providing one central portal for reporting.

As the Census Bureau moves towards all electronic reporting for business survey respondents to cut costs and operate more efficiently, e-correspondence will support the expanded use of online reporting options for all respondents, including the expanded use of e-mail over more costly options such as paper mailing and phone calls. The system is currently in use for more than a dozen business surveys and will be expanded to support all economic survey collections.

### Project - Accelerating Economic Indicators

Over the past few years, the Census Bureau has worked to accelerate the release of economic indicators that provide critical information on internal trade, inventories, and services in the United States. The Census Bureau revised complex processes and ensured the accuracy of the statistics at the earlier release date, all while continuing to publish critical indicator data on a rigorous schedule. The acceleration of key statistics keeps data users better informed at a time when earlier access to information is needed for data-driven decisions and improves the accuracy of early estimates of gross domestic product produced by the Bureau of Economic Analysis. The Advanced International Trade release was completed in July 2015, Advanced Economic Indicator Report in July 2016, and the Advance Quarterly Services Report in February 2017. In addition, the Census Bureau is assessing the feasibility of accelerating the manufacturing indicators and construction indicator programs.

## **Project - Construction Modernization**

Increasing survey costs, falling response rates, and the demand for more timely and granular measures from data users require the evolution of the way in which the Census Bureau does business. The Economic Directorate Construction Modernization project seeks to reengineer the measurement approach to the traditional construction surveys by utilizing alternative data sources, developing modeling techniques, and evaluating the use of satellite technology. These approaches would streamline and simplify data collection and processing efforts and result in much needed advancements in the quality, content, and timeliness of current and new data products. A Census Scientific Advisory Committee (CSAC) working group was formed in late 2019 to support this project.

## Project – Making Economic Indicators More Accessible

The Census Bureau collaborated with a team at the St. Louis Federal Reserve and the Board of Governors to provide indicator data through their mobile application (FRED). In 2018, the Census Bureau saw an increase of more than 50 percent in downloads of indicator data through FRED than in the Census Bureau's previous America's Economy mobile app. Since the inclusion of the Indicator Programs, they have worked closely with the FRED team to broaden the use of Census Bureau data. The Census Bureau continues to collaborate to produce even more data and release it through their mobile application as well as seek opportunities to speak at upcoming FRED events to increase the awareness of Census Bureau data.

## Project - Webinar Series

The Economic Directorate has continued a series of webinars, "Exploring Census Data," designed to make the public more aware of the vast amounts of data the Census Bureau has on vitally important topics. The series endeavors to make the public aware of the full depth of data contained at the Census Bureau across all directorates. These monthly webinars are also recorded and can be accessed anytime on <u>census.gov</u>. Topics include:

Small Business:

Experimental Data Products;

Real Estate;

Leisure:

Market Expansion; and

Manufacturing

A second series of webinars, "Economic Census Updates," focuses on data released from the 2017 Economic Census, which highlights data at the state and industry level. These biweekly webinars are also recorded and can be accessed anytime on census.gov.

The Census Bureau also partners through webinars with other government agencies to help them promote their international trade mandates such as trade promotion, education, and enforcement. The Census Bureau has hosted webinars for the State Department, Bureau of Industry and Security, Export-Import Bank, Small Business Administration, International Trade Administration, District Export Councils, and others.

## Project - The Opportunity Project

<u>The Opportunity Project</u> (TOP) is a process for engaging government, communities, and the technology industry to create digital tools that address their greatest challenges as a nation. This process helps to empower people by using technology to make government data more accessible and user-friendly, and facilitate cross-sector collaboration to build new digital solutions.

TOP connects tech developers, local leaders, and nonprofits with problem statements on issues like jobs, transportation, and housing, and facilitates user-centered tech development sprints to create new digital solutions.

## Federal Advisory Committees

The Census Bureau follows Federal Advisory Committee Act or FACA, which governs the establishment and operation of advisory committees. Currently, their agency has two chartered advisory committees: the <u>Census Scientific Advisory Committee (CSAC)</u> and the <u>National Advisory Committee on Racial, Ethnic and Other Populations (NAC)</u>. Having committee members representing the national demographics and specific fields of expertise aids the agency with its mission and innovation goals. The committees provide sound feedback for their operations, programs, methodologies, technologies, outreach, and current and new developments.

Their agency strives to ensure transparency and openness in all the advisory committees' activities and proceedings. The public has access to the deliberations, along with time to comment on all of the proceedings, in person or in writing. The Census Bureau advisory committee meetings are widely advertised and transmitted via the Census Bureau YouTube channel.

#### Sunshine Week Event

Each year the Census Bureau hosts events in recognition of National Sunshine Week. National Sunshine Week occurs each year in mid-March, coinciding with James Madison's birthday and National Freedom of Information Day on the 16th. It is a national initiative to promote a dialogue with the public about the importance of open government and freedom of information.

### Privacy Day Event

Privacy Day is an annual event that provides a forum for Census Bureau employees and contractors to discuss current data protection and privacy policy and to generate ideas to help evolve the current

policies. The event offers a variety of workshops about major Privacy and E- Government Act requirements, as well as other tools available for protecting their customer's privacy.



## **Economic Development Administration (EDA)**

EDA leads the federal economic development agenda by promoting innovation and competitiveness, preparing American regions for growth and success in the worldwide economy. EDA's investment policy is designed to establish a foundation for sustainable job growth and the building of durable regional economies throughout the United States. This foundation builds upon two key economic drivers - innovation and regional collaboration. Innovation is key to global competitiveness, new and better jobs, a resilient economy, and the attainment of national economic goals. Regional collaboration is essential for economic recovery because regions are the centers of competition in the new global economy and those that work together to leverage resources and use their strengths to overcome weaknesses will fare better than those that do not. EDA encourages its partners around the country to develop initiatives that advance new ideas and creative approaches to address rapidly evolving economic conditions.

As the only federal government agency focused exclusively on economic development, EDA plays a critical role in fostering regional economic development efforts in communities across the nation. Through strategic investments that foster job creation and attract private investment, EDA supports development in economically distressed areas of the United States.

Guided by the basic principle that communities must be empowered to develop and implement their own economic development and revitalization strategies, EDA works directly with local economic development officials to make grant investments that are well-defined, timely, and linked to a long-term, sustainable economic development strategy.

EDA's flexible programs and structure enable nimble operations and allow for innovation and responsiveness to changing economic needs and conditions faced by its local and state government partners. Grants made under these programs are designed to leverage existing regional assets to support the implementation of economic development strategies that advance new ideas and creative approaches to advance economic prosperity in distressed communities.

EDA's economic footprint is wide and its toolbox is extensive—including technical assistance, post-disaster recovery assistance, trade adjustment support, strategic planning and research and evaluation capacity, thereby allowing the agency to offer the most effective investment to help communities succeed in the global economy.

In March of 2021, EDA received a historic infusion of \$3 billion in American Rescue Act funding to invest in America's communities as they recover from the economic damage caused by the coronavirus pandemic. This investment is designed to support bottom-up economic development focused on advancing equity, creating good-paying jobs, helping workers to develop in-demand skills, building economic resilience, and accelerating the economic recovery for the industries and communities hit hardest by the coronavirus pandemic. EDA investments made under the American Rescue Plan will support the Biden-Harris Administration's commitment to build the American economy back better and stronger.

EDA also revised its Investment Priorities in April of 2021 to align with the Biden-Harris Administration priorities, including adding equity as the first priority. This means that EDA will be prioritizing projects that advance equity across America through investments that directly benefit: 1) one or more traditionally <u>underserved populations</u>, including but not limited to women, Black, Latino, and Indigenous and Native American persons, Asian Americans, and Pacific Islanders or 2) underserved communities within <u>geographies</u> that have been systemically and/or systematically denied a full opportunity to participate in aspects of economic prosperity such as Tribal Lands, <u>Persistent Poverty Counties</u>, and rural areas with demonstrated, historical underservice.

## **Open Data**

EDA employs open government standards to help communities develop strategic plans, locate and evaluate regional clusters, explore existing innovation capacity, and maximize the return on infrastructure investments. These include the dissemination of <u>data tools</u> and <u>research reports</u> that EDA makes freely available on its website.

For prospective grantees, EDA makes all funding opportunity notices available on <a href="https://www.eda.gov/funding-opportunities/">www.grants.gov</a> and its website: <a href="https://www.eda.gov/funding-opportunities/">https://www.eda.gov/funding-opportunities/</a>. EDA also has a dedicated webpage providing resources for existing grantees, including training on the use of EDA's online grants portal (Grants Online) and links to various grant and performance-related forms at <a href="https://eda.gov/resources/grantee-information/">https://eda.gov/resources/grantee-information/</a>. Numerous other resources, such as EDA's major investment programs and investment priorities, EDA's implementing regulations, a summary of EDA performance metrics, Annual Reports from Fiscal Year 2007 to 2020, economic development tools and reports, and a state-by-state directory of economic development resources are also available on <a href="https://www.eda.gov">www.eda.gov</a>.

Since the last Open Government Plan 6.0, EDA has deployed new, innovative performance metrics for EDA's non-infrastructure portfolio. The project uses logic and econometric models to assess the outputs, outcomes, and impacts of EDA's non-infrastructure grants portfolio to help economic development practitioners better understand the impact of such investments on long-term economic outcomes. The report detailing this research can be found here: *Innovative Metrics for Economic Development: Final Report*. SRI International and EDA also developed an operational

<u>toolkit</u> for the economic development practitioners' use. The toolkit corroborates the selected non-infrastructure metrics, delineates recommended data collection protocols, enumerates various pertinent data sources, and overall proposes a plan for implementation of the system in accordance with the developed econometric model.

In addition, EDA published a national-level assessment of the impact of EDA infrastructure grants. The report <u>Innovative Metrics for Economic Development: Supplemental Report</u> offers a new lens of analysis for the practitioners looking to maximize the impact of their infrastructure projects.

In 2022, EDA plans to deploy additional performance metrics focused on EDA's American Rescue Plan Good Jobs Challenge. The goal is to set a new standard for evaluating sectoral partnerships that train program participants in skills industry needs and whether that training translates into job placements.

These and many other innovative economic development data are available on EDA's website (https://www.eda.gov/) and EDA's Performance Measurement and Program Evaluation page.

## **Proactive Disclosures**

EDA proactively makes documents available through its Freedom of Information Act (FOIA) reading room which contains over 4,600 pages of materials. EDA anticipates that in 2022, substantial additional materials will be added to the reading room once its American Rescue Plan competitions close. The reading room can be found at https://www.eda.gov/foia/disclosures/.

# **Privacy**

EDA takes seriously its responsibilities to protect privacy, including PII and BII information. EDA ensures its employees are adequately trained on privacy requirements and follows DOC procedures for reporting, responding to and mitigating any breaches of PII. EDA does not engage in data mining.

EDA maintains a number of webpages to communicate its privacy policy for the EDA.gov domain (https://www.eda.gov/privacy/policy/) well as its privacy program as EDA's webpages are fully compliant with the privacy (https://www.eda.gov/privacy/). requirements of Office of Management and Budget Memorandum M-17-06, "Policies for Federal Agency Public Websites and Digital Services" (November 8, 2016). Among those requirements, EDA's privacy program provides an overview of government-wide and Department of Commerce Privacy Act implementation rules and policies on privacy; descriptions of the major privacy laws, policies and guidance; directions on how to make privacy related inquiries; a link to the Privacy Impact Assessment conducted on EDA's IT systems; and information on how EDA does not maintain any Privacy Act System of Records or have any matching notices or agreements.

## **Whistleblower Protection**

EDA strictly adheres to all anti-discrimination and whistleblower requirements. EDA is fully compliant with the Department's No FEAR Act Policy.

### Websites

EDA maintains one domain, <a href="www.eda.gov">www.eda.gov</a>. Through this website, EDA disseminates information related to economic development to the public, communities, and prospective and current grantees. Throughout 2021, EDA's website presence was particularly active as it published FAQs, webinars, and other guides for EDA's six American Rescue Act programs. The website complies with the Department's policies and best practices. EDA follows the Department's digital strategy, which can be found at: <a href="https://www.commerce.gov/digitalstrategy">https://www.commerce.gov/digitalstrategy</a>.

## **Open Innovation Methods**

Nothing to report.

### Access to Scientific Data and Publications

Nothing to report.

## **Open Source Software**

Nothing to report.

# **Spending Information**

EDA is in compliance with the Digital Accountability and Transparency Act of 2014 (DATA Act). The National Oceanic and Atmospheric Administration (NOAA) is EDA's financial service provider and enters financial data into the Commerce Business System (CBS), the Department's financial system on EDA's behalf, including additional financial information to USAspending.gov after undergoing a validation process. EDA will continue submitting its grant records to USAspending.gov in compliance with the requirements of the DATA Act.

# **Participation in Transparency Initiatives**

EDA actively contributes to and participates in Data.gov, Grants.gov, eRulemaking, IT Dashboard, CFDA.gov, and USAspending.gov.

## **Public Notice**

EDA utilizes a variety of methods to keep the public contemporaneously aware of its initiatives, funding opportunities, programs, resources, and events. The primary tools for this are EDA's Newsroom, available at: https://www.eda.gov/news/, the **EDA** (https://www.eda.gov/news/blogs/), and its social media feeds: Twitter @US EDA, Instagram Facebook eda.commerce, YouTube EDACommerce, LinkedIn usedagov, and www.linkedin.com/company/us-economic-development-administration.

## **Records Management**

EDA's records management specialist takes lead responsibility for ensuring EDA complies with all applicable record retention and archival regulations. EDA is following the Department's guidance on moving to electronic records.

## Freedom of Information Act (FOIA) Requests

All EDA FOIA requests are reviewed and responded to promptly. EDA does not have a backlog of FOIA requests. Requests may be submitted electronically through the Department's e-FOIA system or directly to EDA or its regions. EDA's FOIA reading room is used to proactively disclose the most frequently requested documents and contains over 4,600 pages of materials. EDA anticipates adding additional documents to the reading room once its popular American Rescue Plan competitions close. General FOIA information can be found at <a href="https://www.eda.gov/foia/disclosures/">https://www.eda.gov/foia/disclosures/</a>.

# **Congressional Requests**

EDA handles Congressional requests through its Legislative and Intergovernmental Affairs Division (LIAD). LIAD responds to all incoming communication from Members of Congress and keeps all records of those correspondences and responses. The Office of the Executive Secretariat, a sub-office within LIAD, has primary responsibility for logging in the correspondence, including the date received, and closing out the action upon completion. The Office of the Executive Secretariat also has responsibility for conducting research and informing the Director of LIAD of any issues related to the subject communication. Finally, the Office of the Executive Secretariat is responsible for obtaining the necessary clearances and signatures.

All correspondence must be closed out within a two-week period, unless special circumstances prevent the completion within that time frame. In those instances, files are documented accordingly, and the Congressional office is contacted.

## **Declassification**

EDA does not have statutory or delegated authority to classify or declassify information. EDA supports the Department's declassification program by providing subject matter expertise when material is presented with EDA mission equities.

## **Public Participation**

Through resources such as its Economic Development Representatives, EDA works directly with local economic development officials to make them aware of the resources available to them through EDA's various grant programs. In 2021, EDA added a tribal coordinator position specifically to engage with tribes in a government-to-government capacity. EDA also proactively reaches out to prospective and current grantees, stakeholders and local communities directly and at meetings and conferences to help them align community needs with EDA's mission, clarify EDA grant requirements and apprise them of EDA and other Federal economic development funding opportunities.

## Collaboration

EDA has been designated by OMB to serve as the federal government's lead integrator for economic development. As the lead integrator of Federal economic development investments, EDA's role is to facilitate planning, collaboration and coordination among participating Federal agencies to ensure that:

Federal resources are invested in support of locally-identified strategies and projects designed to produce transformational economic diversification and workforce development outcomes; and

Multiple Federal economic development resources are successfully aligned and invested to support various projects in discrete, non-duplicative activities.

EDA's vision for Economic Development Integration (or EDI) is to improve the Federal government's ability to serve as a constructive partner to local and regional economic development stakeholders. The core components of this vision include:

<u>Silo-Busting</u>: Removal of the bureaucratic and administrative barriers, and facilitating direct, ongoing communication and collaboration across Federal agencies and program offices.

<u>Enhanced</u>, <u>Responsive Service Delivery</u>: Responsive to locally-identified economic development needs and objectives, and providing the necessary level of project support and related guidance.

<u>Strategic</u>, <u>Integrated Investments</u>: Investing a combination of resources from multiple agency programs in support of high-impact economic development strategies and

projects.

For more information on EDI, see <a href="https://www.eda.gov/edi/www.eda.gov/edi/www.eda.gov/edi/www.eda.gov/edi/www.eda.gov/edi/www.eda.gov/edi/www.eda.gov/edi/what-is-edi.htm">https://www.eda.gov/edi/what-is-edi.htm</a>.

# **EDA Open Government Initiatives**

The table below shows a list of initiatives for EDA.

Table 7 - EDA Initiatives

Operating Unit	Project	Status	Estimated Completion
EDA	Launch of New Good Jobs Challenge Performance Measurements	Ongoing	Late 2022

Launch of New Good Jobs Challenge Performance Measurements (Late 2022)

In late 2022 EDA plans to deploy innovative performance metrics for its American Rescue Plan Good Jobs Challenge that will evaluate sectoral partnership's ability to train program participants in skills industry needs and to place those individuals into jobs.



# **International Trade Administration (ITA)**

The International Trade Administration (ITA) strengthens the competitiveness of U.S. industry, promotes trade and investment, and ensures fair trade through the rigorous enforcement of trade laws and agreements. ITA works to improve the global business environment and helps U.S. organizations compete at home and abroad.

ITA is the leading U.S. Government resource for American companies competing in the global marketplace. ITA's efforts to promote exports and foreign direct investment into the United States support the nation's sustained economic growth, in part by providing actionable information to U.S. companies, foreign buyers of U.S. goods and services, and foreign investors on opportunities that create jobs in the United States.

In this plan, ITA describes efforts to make its work transparent and accountable, following the principles of transparency, participation, and collaboration as described in the Openness Promotes Effectiveness in our National (OPEN) Government Act of 2007. ITA has also included in this plan its efforts under the OPEN Government Data Act, enacted in 2019, to publish its information online as open data, using standardized, machine-readable data formats, with their metadata included in the Data.gov catalog.

# **Making Public Assets Available**

ITA makes its data publicly available through the <u>Trade Developer Portal (TDP)</u>, a collection of Application Programming Interfaces (APIs) that allow software developers to create web and mobile applications using information produced by ITA and other U.S. Government trade promotion agencies.

Currently, ITA has nine APIs available for public use that are sourced from ITA, the Department, and other trade agency data. These APIs provide information about business opportunities (trade leads), trade events, *de minimis* and VAT amounts, locations of domestic export assistance centers, locations of international offices, and the tariff rates for Free Trade Agreements (FTAs). ITA's most popular API is the Consolidated Screening List (CSL). During FY21, this API grew to include three additional export screening lists, bringing the total of included export screening lists to 13. These screening lists are published by the Departments of Commerce, State, and the

Treasury. ITA combines these separate lists into a single data feed as an aid to industry for electronic screening of potential parties to transactions.

ITA routinely works with customers, responding to questions and assisting where appropriate with their integration efforts. During FY22 Q1, ITA moved the CSL API to an ITA standard platform, reducing the cost of the service and its maintenance. During this time, ITA's APIs were accessed an average of 15.3 million times per month an increase of 9% from the same time period the previous year. Additionally, the usage of CSL downloaded files decreased from 988,722 downloads to 659,856 downloads, a decrease of 33%. This decrease is a result of educating our customers regarding the frequency of updates to the CSL downloadable files.

# Steps to Encourage Public Use, Promote Public Knowledge, and Foster Innovation

In addition to providing data as APIs, ITA continues to provide data to the public through a variety of search and analysis tools and data visualizations. In FY22, ITA has continued to modernize and add to its data offerings, launching new data visualizations on key trade topics and incorporating dynamic visualization elements where appropriate. Below are examples of these data visualizations that can be accessed on trade.gov:

Foreign Trade Remedies on U.S. Exports
U.S. Steel Import Monitor
U.S. Aluminum Import Monitor
COVID-19 Travel Industry Monitor
Monthly Travel Trade Monitor
Metropolitan Export Data Series
ITA Manufacturing Industry Tracker
Monthly Trade Infographic
Top Trade Partners

Dynamic data visualizations make complex data more accessible and easily understandable to diverse public audiences. ITA has made data visualization tools available to its workforce enabling them to make ITA's data offerings more easily accessible to its customers.

In FY22, ITA released interactive tools to update and improve access to popular data products, including:

<u>Trade Stats Express</u>
<u>Jobs Supported by Exports</u>

In addition, ITA continues to provide key data resources that allow U.S. companies to explore global markets and take advantage of U.S. FTAs. These include:

# Market Diversification Tool FTA Tariff Tool

ITA is the original U.S. Government data source for statistics on international travel and tourism. To complement its data on <u>International Air Travel Statistics (I-92)</u> and the <u>I-94 Arrivals Program</u>, ITA has recently added interactive data tools to allow public audiences to explore its travel and tourism data, including:

Survey of International Air Travelers (SIAT) Survey Monitors I-94 Visitor Arrivals Monitors

The complete suite of public data tools and infographics can be found at: <a href="https://www.trade.gov/trade-data-analysis">https://www.trade.gov/trade-data-analysis</a>

### **Data Governance and Asset Identification**

In accordance with the Foundations for Evidence-Based Policymaking Act of 2018, ITA has established the Data Asset Advisory Group (DAAG). The DAAG is a standing internal advisory group that is responsible for the oversight and documentation of ITA datasets throughout their lifecycle. Through the DAAG, ITA now provides a list of public-facing datasets at <a href="https://www.trade.gov/data">https://www.trade.gov/data</a>.

# **Privacy**

ITA completes the annual Federal Information Security Management Act (FISMA) report and submits it to the Senior Agency Official for Privacy (i.e., Executive Council for Privacy, through the Department's Chief Privacy Officer). Potential breaches of the Privacy Act (PA), personally identifiable Information (PII), or business identifiable information (BII) are reported in compliance with the Department's <u>PA</u>, <u>PII</u>, and <u>BII Breach Notification Plan</u>. For the breach of PII incident reports, ITA files the initial breach incident reports with the Chief Privacy Officer and the DOC Computer Incident Response Team (CIRT), which maintains a report on all PII breach incidents.

### Whistleblower Protection

ITA takes seriously its commitment to the Whistleblower Protection Act. ITA performs the following activities in support of Whistleblower Protection:

Information about Whistleblower Protection and ITA's commitment to it is included in ITA's periodic New Employee Briefings.

ITA invites the Office of the Inspector General Ombudsman annually to brief Office Directors on Whistleblower Protection and to respond to their questions.

ITA's Deputy Under Secretary sends an annual statement to ITA's workforce reasserting

ITA's commitment to Whistleblower Protection.

Once a year, ITA includes an article in the Office of the Chief Financial and Administrative Officer "News You Can Use" publication, reminding staff about Whistleblower Protection and ITA's commitment to it.

The Office of the Chief Financial and Administrative Officer intranet site contains a section on Whistleblower Protection so that ITA employees can research the topic independently.

## Websites

ITA provides clients digital access to comprehensive trade and export information, products and services through a uniform website experience adhering to the guidelines set about by the 21<sup>st</sup> Century Integrated Digital Experience Act, including most of the data visualizations and data products referenced further above. ITA's website includes experiences based on user needs, a uniform and consistent design, mobile readiness, Section 508 compliance, search functionality and quality assurance. Additionally, ITA is in the process of consolidating all digital authentication experiences into a new uniform website experience to provide increasingly customized experiences and more targeted interaction with ITA's digital trade content, export data, events, and services.

ITA continues to make its information directly available to partners and other interested third parties via open data tools and API keys, further expanding ITA's public engagement to sites that integrate content for the business and export communities outside of ITA's own digital properties.

ITA's website includes information regarding trade agreements and trade barriers. U.S. exporters may digitally file a complaint about foreign government trade barriers through an online form putting clients directly in contact with ITA's Enforcement and Compliance business unit.

# **Transparency**

ITA actively contributes to Data.gov. The agency currently has 44 datasets posted to Data.gov. In addition, ITA business units provide online access to a variety of data, reports, resources, and other critical information that keeps the public up to date on the agency's activities, for example:

ITA provides access to public versions of documents submitted to the record of Antidumping and Countervailing Duty cases through the <u>ACCESS</u> system.

The <u>U.S. Foreign-Trade Zones Board</u> staff provides updated information on all existing and potential foreign-trade zones, including announcements of open public comment periods and case status, on the website.

ITA provides antidumping and countervailing duty fact sheets, which inform importers, Customs brokers, and other public stakeholders of the duty rates that will go into effect on certain imported products.

The <u>Industry Monitoring and Analysis Unit</u> provides detailed statistical analysis about the U.S. and global <u>steel</u> and <u>aluminum</u> industry on the public website. This includes 40 written reports on the top global steel exporting and importing countries, an interactive steel trade monitor allowing for public access to information regarding this important sector facing negative impacts in part from global excess capacity. This also includes current U.S. import monitors about steel and aluminum, which draw from import licenses.

ITA routinely evaluates the data on Data.gov and the TDP for timeliness, accuracy, and relevancy to API customers. ITA will continue to add new datasets as they become available and retire datasets when they are no longer needed.

### **Public Notice**

ITA utilizes a variety of methods to keep the public aware of its initiatives, trade remedy actions, programs, resources, and events. For example, ITA has advisory committees on many industries and topics critical to U.S. economic competitiveness. Committee members represent a diverse array of views and interests from the U.S. private and public sector. Their advice is used by ITA and the Department to design policies and programs that keep the United States competitive in a global economy and achieve the Department's goals for trade and investment.

Below is a listing of advisory committees managed or co-managed by ITA as of January 2022:

Advisory Committee on Supply Chain Competitiveness

Civil Nuclear Trade Advisory Committee

Department of Commerce Trade Finance Advisory Council

Environmental Technologies Trade Advisory Committee

Industry Trade Advisory Committee on Aerospace Equipment

Industry Trade Advisory Committee on Automotive Equipment and Capital Goods

Industry Trade Advisory Committee on Chemicals, Pharmaceuticals, Health Science

Products and Services

Industry Trade Advisory Committee on Consumer Goods

Industry Trade Advisory Committee on Critical Minerals and Nonferrous Metals

Industry Trade Advisory Committee on Customs Matters and Trade Facilitation

Industry Trade Advisory Committee on Digital Economy

Industry Trade Advisory Committee on Energy and Energy Services

Industry Trade Advisory Committee on Forest Products and Building Materials

Industry Trade Advisory Committee on Intellectual Property Rights

**Industry Trade Advisory Committee on Services** 

Industry Trade Advisory Committee on Small, Minority, and Women-led Business

Industry Trade Advisory Committee on Standards and Technical Trade Barriers

Industry Trade Advisory Committee on Steel

Industry Trade Advisory Committee on Textiles and Clothing President's Advisory Council on Doing Business in Africa President's Export Council Renewable Energy and Energy Efficiency Advisory Committee United States Manufacturing Council United States Investment Advisory Council United States Travel and Tourism Advisory Board

ITA's foreign direct investment program, SelectUSA, regularly distributes information about its programs, resources, and other events via email blasts and social media. SelectUSA sent emails to interested parties during the planning stages for the 2021 SelectUSA Investment Summit, recruiting for the event, providing a platform for economic development organizations, and spreading the news about job-creating business investment projects. SelectUSA's social media account regularly reaches tens of thousands of users.

The first **virtual** Investment Summit also saw record-breaking numbers with over 3,400 participants, representation from all U.S. states and territories, and over 80 international markets. The event featured over 500 world-class speakers and over 200 sessions with interactive virtual exhibition halls for Economic Development Organizations, service providers, and SelectUSA Tech participants. SelectUSA was able to bring everyone together by utilizing a very robust networking platform where participants could make the connections they needed to push their investments forward. SelectUSA held a hybrid Investment Summit in June 2022.

ITA's Global Markets and U.S. & Foreign Commercial Service unit, frequently shares program information with the U.S. business community through its network of more than 200,000 e-mail subscribers. In addition, U.S. & Foreign Commercial Service staff present at hundreds of local events each year to raise awareness of ITA programs and services and to conduct targeted outreach and recruitment of the U.S. businesses community as opportunities, trade leads, trade missions, and events arise.

ITA also publishes and maintains on trade.gov a complete line of free information products for U.S. exporters and potential exporters. These information products include popular "Export Solutions" trade education articles and videos, authoritative Country Commercial Guides for more than 130 countries, more than 600 timely and actionable Market Intelligence articles, and a number of in-depth industry guides. In the past year, ITA achieved major improvements in the quality of this online information, including the removal of 1,300 broken web links. These quality improvements have made this information more widely accessible to members of the public using online search engines. Video remains a popular way to engage and educate exporters. ITA updated its online trade education videos, including the popular "Exporting Basics" series, which has now drawn nearly 600,000 video views. These updates helped grow ITA's YouTube following by

another 3,200 subscribers to 19,900 total subscribers. ITA continues to raise public awareness of these resources through targeted email and social media outreach. The "What's New in Exporting" email service has more than 160,000 subscribers. OSE-managed exporter-focused social media accounts have approximately 34,000 Twitter followers, 21,000 Facebook followers, 29,000 LinkedIn showcase page followers, and 8,000 LinkedIn group members.

## **Records Management**

ITA's Records Management Program has embarked on the following initiatives to ensure compliance with the Federal Records Act, related NARA regulations, and M-19-21, the joint OMB and NARA Memorandum on Transition to Electronic Records:

## Records Management Policy Update

In July 2022, ITA's Records Management Program updated the agency records management policies that govern all ITA records based on the concept of a record's lifecycle, which has three stages: creation, maintenance, and disposition. The updated directives fully comply with the statutory and regulatory requirements of the Federal Records Act, and other relevant guidance issued by NARA and OMB. The policies are modernized and comprehensive, taking into account all associated aspects of electronic records management, such as email records management, the use of electronic messaging applications, and data retention of electronic information systems.

#### ITA Records Schedules Modernization

In order to make records schedules more suitable to the context of full electronic records and information management, as M-19-21 directs, ITA is modernizing the agency records schedules to "big bucket" records schedules with function-based and media neutral features. The modernized records schedules will be easily incorporated into the design of electronic systems for systematic records management. Once fully implemented, the clarified records ownership and updated flexible records series will significantly reduce records and data redundancy, which will contribute to Open Government and e-discovery goals.

### Full Electronic Records Management

ITA's Records Management Program has set a detailed action plan to manage all ITA records electronically to the fullest extent possible by FY24. ITA will manage all permanent records in an electronic format with appropriate metadata (Goal 1.2 of M-19-21) and manage all temporary records in an electronic format by 2022 (Goal 1.3 of M-19-21). The new ITA records management policies pursue full electronic records management starting from January 1, 2023, with no net new paper records to be created or processed after that date.

## Records Management Training with Role-Based Modules

ITA is developing improved role-based training tools to annually inform all agency personnel of their records management responsibilities in law, regulations, and policy (see Goal 1.4 of M-19.21). ITA is introducing the agency-specific and role-based training modules for Senior Officials, all staff members, contractors, and new employees. Also, the ITA Records Liaison Officer Program trains all Records Liaison Officers with advanced records lifecycle training in FY23.

## Freedom of Information Act (FOIA) Requests

ITA has the capacity to analyze, coordinate, and respond to FOIA requests. As reported in the FOIA Annual Report, the average number of days for ITA to respond to a simple FOIA request is 20 days or less. Over the past three years, ITA has reduced its backlog of requests by approximately 40 percent.

ITA conducts electronic records searches on a network-wide level. This process allows for faster and more comprehensive electronic record searches. To ensure effective processing of FOIAs and increase transparency, ITA FOIA liaisons and subject matter experts (SMEs) are provided technical support and training regarding FOIA guidelines. In addition, SMEs are trained on best practices for performing searches and provided electronic tools to streamline the redaction process which reduces document release time in support of open government and transparency. In FY22, ITA will continue to provide training to FOIA liaisons and SMEs. ITA is also working to continue the improvement of its data processing and will begin the testing phase of an e-discovery tool in FY22.

#### FOIA links:

Description of the staffing and organizational FOIA program.

Department of Commerce FOIA reports.

Process for analyzing and responding to FOIA requests:

Office of Privacy and Open Government

Code of Federal Regulations

#### **Proactive Disclosures**

ITA has utilized <u>FOIAonline</u> to process all FOIA requests since the beginning of FY2013. If a requestor submits a request other than through FOIAonline, ITA uploads the request into <u>FOIAonline</u> to be processed. Once a request is in the system, the general public has electronic access to what is being requested and where the FOIA request is in the FOIA process. If responsive

records are located and can be released, they are publicly disclosed electronically through FOIAonline.

## **Congressional Requests**

ITA's Office of Legislative and Intergovernmental Affairs (OLIA) analyzes and responds to Congressional requests for information. ITA follows the Department's guidelines related to public disclosure of Congressional requests and agency responses.

## **Declassification**

ITA does not have statutory or delegated authority to classify or declassify information in accordance with E.O. 13526, Classified National Security Information. This authority, referred to as Original Classification Authority (OCA) outlined in Part 1 of E.O. 13526, resides with the President, Vice President, designated agency heads and officials, and other U.S. Government officials to the extent delegated.

ITA supports the Department's declassification program by providing subject matter expertise when material is presented with ITA mission equities. The subject matter expert, normally the Deputy Assistant Secretary for the area, reviews the material and makes a recommendation to the Department for declassification. Those recommendations are approved by ITA's Deputy Under Secretary and forwarded to the Department for final determination and action.

# **Participation**

ITA depends on the continued participation of its public and private sector clients and stakeholders to carry out its mission. ITA assisted more than 31,000 companies from all 50 states and including urban and rural localities in FY21, with the vast majority (86 percent) being small and medium-sized enterprises. On average, as a result of ITA's assistance, clients reported that they increased their annual company revenue by seven percent. ITA staff members throughout the world are committed to providing excellent customer service – eight out of 10 clients would likely recommend ITA's assistance. Clients highly value ITA's local and global network of trusted, impartial, and dedicated professionals with specialized knowledge and affordable services that otherwise would not be available to them. Delivering on this value while maintaining such high customer service requires the use of a multitude of tools.

ITA is taking advantage of new technologies and communications platforms to get its products and services into the hands of its customers. ITA's business units are also developing new approaches to meeting the needs of stakeholders. Some prime examples include:

ITA is sponsoring its annual <u>Discover Global Markets (DGM)</u> Business Forum Series in selected cities around the country. In 2022, a DGM is scheduled in Providence, Rhode Island that will allow attendees to tap into ITA's global expertise and to explore opportunities in key industry sectors that offer high export potential. ITA actively recruits attendees through the <u>trade.gov</u> web portal, Twitter, LinkedIn, and Facebook.

ITA organizes the <u>Trade Winds Series</u>, an annual business development forum and trade mission which connects U.S. clients with businesses and government officials in markets around the world. Trade Winds forums have been held since 2008 in Turkey, Poland, Brazil, Mexico, Singapore, South Korea, Colombia, South Africa, Chile, Romania, and India with additional mission stops covering regions in Europe, Asia, Latin America, and Sub-Saharan Africa. The series has provided a forum for business matchmaking and growing U.S. exports to 40 countries. Consisting mostly of small and medium-sized manufacturers, attendees have hailed from 48 states. The Trade Winds program has been attended by more than 1,000 U.S. companies and generated nearly 7,000 meetings with U.S. commercial diplomats and more than 4,500 business-to-business matchmaking meetings. Companies have reported more than \$3.4 billion in sales because of their participation in the program. Trade Winds 2022 was held in Dubai, United Arab Emirates, and was the largest Trade Winds held to date.

The eCommerce Innovation Lab helps U.S. business adapt and grow in the global digital economy through activities such as identifying export opportunities across the ecommerce sales channels from a concentration on digital strategy development, using Website Globalization Review gap analysis tools, and leveraging online tools developed to build digital capacity across industrial sectors such as the eCommerce Export Resource Center business library.

By bringing international resources, including international expertise and export counseling, to rural areas, ITA's <u>Rural Team</u> helps rural companies bring their products to world markets and helps attract foreign direct investment into rural America. The Rural Team members help rural companies leverage ITA staff in more than 100 offices throughout the United States and U.S. Embassies and Consulates in more than 78 markets around the world.

## **Collaboration**

ITA has launched a knowledge management initiative that initially aims to provide a platform for broader internal collaboration among the Department and interagency partners related to the creation, use, and distribution of ITA information products.

ITA houses the secretariat for the <u>Trade Promotion Coordinating Committee</u> (TPCC), the interagency committee that supports the administration's overall trade promotion strategy. The mission of the TPCC is to foster coordination among trade agencies that will make it easier for

U.S. exporters to access the information and services they need. The TPCC consists of 20 U.S. Government departments and agencies and is chaired by the Secretary of Commerce. Since Congress mandated the establishment of the TPCC in the early 1990s, the interagency committee has coordinated and developed government-wide priorities for federal trade promotion efforts, including export assistance and financing programs.

The TPCC helps to coordinate 20 federal agencies that are advancing program and policy improvements to provide exporters more tailored assistance and information, streamlining export reporting requirements, expanding access to export financing, helping ensure market access and a level playing field, and partnering at the state and local level to support export promotion strategies. These efforts enable more U.S. businesses to capitalize on existing and potential opportunities created by Free Trade Agreements and the U.S. trade agenda.

# ITA Open Government Initiatives

The table below shows a list of initiatives for ITA.

Table 8 - ITA Initiatives

Operating Unit	Project	Status	Estimated Completion
ITA	Developing a 21st Century Digital Presence to Better Serve Customers	Completed	12/31/2019 (Iteration I)
	Raising awareness of the SelectUSA program and its available services	Live/Operational	
	Market Intelligence Program: actionable market intelligence fed to U.S. exporters via export.gov	In Progress	
	Providing industry-specific information on global market opportunities and challenges	Live/Operational	
	Supporting ITA Data Thru Cloud Services	In Progress	
	Making complex knowledge products available through Office 365 and Salesforce integration	In Progress	

# **Project – Developing a 21<sup>st</sup> Century Digital Presence to Better Serve Customers**

What's New – Improving communications with the public by utilizing all available online and social media platforms and channels

ITA has launched a new 21<sup>st</sup> Century digital presence to better serve customers and stakeholders that adheres to the tenets of the 21<sup>st</sup> Century Integrated Digital Experience Act. ITA has also established a permanent Office of Digital Strategy & Engagement led by a recognized digital expert and positioned within the newly branded Technology, Services and Innovation team responsible for modernizing ITA's entire technology platform.

The new Office of Digital Strategy & Engagement is underway with building out a best-in-class digital technology platform with the flexibility to serve ITA's digital needs for years to come. Additionally, the new digital team is working with Change Management experts from across ITA to execute the organizational change management necessary to unlock the full capabilities of the new digital strategic direction for ITA to better serve customers and stakeholders in the ever-evolving digital landscape.

## Project – Raising awareness of the SelectUSA program and its available services

What's New – Expanding online access to the SelectUSA program and Federal government resources to attract and retain business investment in the United States

ITA prioritized efforts to attract and retain business investment in the United States through ITA's SelectUSA program. SelectUSA is the first federal-wide effort to promote and facilitate business investment in the United States as an engine for job growth and economic development. SelectUSA facilitates business investment into the United States by serving two types of clients: U.S. state/regional/local Economic Development Organizations (EDOs), and international companies currently located in the United States or planning to enter the U.S. market.

SelectUSA helps companies of all sizes find the information they need to make decisions, connect to the right people at the local level, and navigate the federal regulatory system. SelectUSA also assists U.S. EDOs to compete globally for investment by providing information, a platform for international marketing, and high-level advocacy. The SelectUSA program coordinates investment-related resources across U.S. federal agencies and is the single point of contact at the national level to help international and domestic firms grow and invest in the United States.

The SelectUSA's website (<u>www.SelectUSA.gov</u>) provides industry-specific content, features economic market intelligence outlining key reasons why the United States is the premier international investment destination, describes the federal government resources available to businesses looking to invest, and highlights upcoming events hosted by SelectUSA and its partners to promote and facilitate investment in the United States.

A major component of the website includes the publication of new data tools that greatly expand public access to research databases and other resources. These tools enable potential investors, economic development organizations, and the general public to quickly identify opportunities for investment within the United States. The online tools featured on the SelectUSA States website include:

*SelectUSA Stats*: Created and managed by SelectUSA, the FDI interactive data visualization tool allows companies and EDOs to quickly access and analyze latest available industry, country, and state level FDI data with only a few mouse clicks. <u>SelectUSA Stats (trade.gov)</u>.

*U.S. Cluster Mapping Tool*: Led by Harvard Business School in partnership with the U.S. Economic Development Administration, this tool maps more than 50 million data points and provides easy-to-access data on industry clusters and innovation hubs. Users can better understand regional economies and local competitive strengths. <a href="http://clustermapping.us/">http://clustermapping.us/</a>.

Assess Costs Everywhere (ACE) Tool: Created by the Department of Commerce's ESA, this tool provides an analytic framework for understanding the full range of costs associated with manufacturing in the United States versus other locations. Users will find links to resources and case studies. <a href="http://acetool.commerce.gov/">http://acetool.commerce.gov/</a>.

**Total Cost of Ownership Estimator**: This free online tool helps manufacturers aggregate all their cost and risk factors into one (1) cost for more objective decision-making regarding sourcing and reshoring. <a href="http://reshorenow.org/TCO">http://reshorenow.org/TCO</a> Estimator.cfm.

*Federal Programs Database*: This database provides businesses, EDOs, and policy makers a comprehensive collection of programs offered by U.S. government agencies designed to support business in the United States. https://www.trade.gov/selectusa-resources-and-information.

*State Business Incentives Database*: Powered by the Council for Community and Economic Research, this database is a resource for potential investors to find incentive programs for all 50 states and U.S. territories. http://selectusa.stateincentives.org/?referrer=selectusa.

These online data tools help transform Department of Commerce and private data into easy to use, transparent tools to assist SelectUSA clients.

## **Project - Market Intelligence Program**

What's new – Creating a constant stream of actionable market intelligence fed to U.S. exporters via export.gov.

ITA is leading an effort that will establish a means for developing and sharing actionable market intelligence with U.S. exporter clients via an automated web-based system accessed via export.gov. Drawing on ITA's global network of experts, the Market Intelligence Program will provide a constant stream of short articles enabling U.S. firms to access the most recent information on international market developments, opportunities, and issues. This program will provide a year-round complement to the annually-produced Country Commercial Guides and Top

Market Reports.

# **Project** – **Providing industry-specific information on global market opportunities and challenges**

What's New – Introducing industry-specific exporting opportunities to U.S. companies through Top Markets Reports posted on trade.gov.

ITA's Industry and Analysis (I&A) unit focuses on helping U.S. businesses become more competitive in the global marketplace by ensuring that exporters and federal government trade policy and promotion agencies have access to industry-specific information on global trends and opportunities. To accomplish this, ITA has developed Top Markets Reports. These industry-specific reports help exporters and government agencies prioritize efforts that could significantly improve U.S. export performance.

The Top Markets Series is a market prioritization tool developed to share I&A's sector expertise with clients. The series combines I&A's unique industry knowledge with the on-the-ground experiences of ITA's Global Markets/Commercial Service international staff and the data analytics of I&A's economists. This helps U.S. firms determine their next international market by comparing opportunities across borders. Top market analysis ranks future export markets within sectors and offers commentary on the opportunities and challenges facing U.S. exporters in key markets.

Internally, ITA uses Top Markets to assess competitiveness within a sector, as well as the opportunities and challenges facing U.S. exporters in key markets. Externally, the primary beneficiaries of Top Markets analysis are small and medium-size enterprises (SMEs). SMEs need to identify the best markets where they can expand sales, grow market share, and minimize risk. They don't need to know where they can export but rather where they should export. Using information from Top Markets, they can identify target markets where they want to dig deeper, investing in more specific market research from the private sector. Additionally, interagency industry-group stakeholders and other non-SME clients rely on the Top Market Series to provide key industry-specific intelligence.

Public versions of Top Markets Series are available at <a href="http://trade.gov/topmarkets/">http://trade.gov/topmarkets/</a>. These legacy reports cover 27 industries, from agriculture equipment to technical textiles. In 2020, I&A will begin replacing these static reports with content that relies primarily on data visualization and that is more concise and scalable across IT devices.

## **Project – Supporting ITA Data through Cloud Services**

Previously called, "Improving the Enterprise Data Services Platform (EDSP) to Support Internal Agency Usage", "Supporting ITA Data through Cloud Services" will be built on cloud services, providing ITA with the ability to scale the platform as needed to manage the throughput and

associated costs. This platform will support ITA's internal data analysts by providing an easily accessible platform for staff to use for data modeling, wrangling, analyzing, and displaying data. Further, this platform will support the technology modernization efforts within ITA, supplying a single platform for supporting ITA data and making data governance possible.

Data visualizations created using this platform will no longer be static charts and graphs, but rather will be dynamic visualizations that will allow users to select components to view the data in different ways. Many of these dynamic data visualizations will also be shared with the public, embedded directly into ITA's website and incorporated into public reports. This initiative will not only enhance the data visualizations currently available on the website, it will also provide ITA with the ability to add additional visualizations providing U.S. companies with greater insight into the trends in international trade so that they can better choose their next market.

# Project – Making complex knowledge products available through Office 365 and Salesforce integration

ITA has expanded upon the Federal CIO's mandate of "Cloud First" and adopted a "Cloud Only" technical architecture. Nearly all information technology (IT) resources required by our workforce now reside in FedRAMP accredited cloud environments. Our target software development platforms for all business needs are Salesforce, Microsoft O365/Azure, and Drupal. Legacy systems are universally hosted in Amazon Web Services (AWS) Infrastructure as a Service (IaaS) while Information Technology Service Management (ITSM) systems are provided by ServiceNow Software as a Service (SaaS). ITA no longer provisions or manages physical servers or maintains a presence in a traditional data center. Developmental Operations (DevOps) are also consolidated in AWS using Team Foundation Server (TFS), AutoRabit, and Atlassian JIRA. Finally, ITA is moving away from Oracle Unified Content Management (UCM) to Drupal for curation of our various web properties.



## **Minority Business Development Agency (MBDA)**

MBDA is an entrepreneurially focused organization committed to the support of minority-owned and operated business enterprises. MBDA was created in 1969 to foster the growth and global competitiveness of these U.S. businesses. On November 15, 2021, the President signed the Minority Business Development Act of 2021 (Act) under the Infrastructure Investment and Jobs Act, P.L. 117-58. The Act codifies MBDA within the Department of Commerce and appoints an Under Secretary to lead MBDA. The Act establishes MBDA's mission to support and grow minority business enterprises (MBEs). It also calls upon MBDA to establish new regional offices, reach rural communities, establish an advisory council, and serve as federal coordination hub of all MBE-related federal programs, and conduct research and information pertaining to MBEs.

The MBDA actively coordinates and leverages public and private-sector resources that facilitate strategic alliances in support of its mission. MBDA's vision is economic prosperity for all American business enterprises.

The MBDA provides funding for a network of Minority Business and Specialty Centers located throughout the Nation and other projects. The Centers provide technical assistance and business development services to minority business enterprises (MBEs). The Centers are staffed by business consultants who have the knowledge and experience needed to support MBEs in their respective growth journey and capacity building. The Centers generally charge nominal fees for specific management and technical assistance services. The Centers are located in areas with the large concentrations of minority populations and businesses. The Centers are encouraged by MBDA to cross collaborate with other Centers and local partners. As such, business referral services are provided to MBEs based on their specific need.

# **Open Data**

MBDA requires its Business and Specialty Centers to conduct formal client engagement. As such, the Centers conduct client intake and implement client engagement forms to: (a) acknowledge the Center-client relationship, (b) provide firm contact and profile information, (c) disclose outcomes based on services provided by the Center, and (d) provide documentary verification of transactions resulting from the services provided by the Center. The client engagement also includes privacy disclosure and information use language whereby MBDA may use data for the purpose of

conducting research, studies, and analysis consistent with the MBDA mission. In addition, MBDA enables the sharing and use of minority business data with other federal agencies for research purposes.

## **Privacy**

MBDA notifies the minority business client that the information shared with its Centers is considered "business confidential" and will not be shared with any other person or organization outside the U.S. Federal Government, unless MBDA obtains permission by the minority business client. Further, all "business confidential" information will be protected from disclosure to the extent permitted by law.

The MBDA completes each annual FISMA report, specifically questions 1 and 6, and the Federal Agency Data Mining report. These reports are submitted through the Senior Agency Official for Privacy, (i.e., Executive Council for Privacy, through the Department's Chief Privacy Officer). MBDA also provides updated information on the FISMA report regarding privacy training, PII holdings, and SSN use for the agency. For the breach PII incident reports, MBDA files the initial breach incident reports with the Chief Privacy Officer and the DOC CIRT, which maintains a report on all PII breach incidents.

## Freedom of Information Act (FOIA) Requests

The MBDA has the capacity to analyze, coordinate, and respond to FOIA requests. As reported in the Fiscal Year 2021 FOIA Annual Report, the average number of days to respond to a simple FOIA request was 182.5 days. MBDA did not receive complex requests.

### **Proactive Disclosures**

The MBDA has utilized <u>FOIAonline</u> to process all FOIA requests since the beginning of FY2013. If a requestor submits a request other than through <u>FOIAonline</u>, MBDA uploads the request into <u>FOIAonline</u> to be processed. Once a request is in the system, the general public has electronic access to what is being requested, where the FOIA request is in the FOIA process, and if responsive records are located and can be released. Requests are publicly disclosed electronically through <u>FOIAonline</u>.

## **MBDA Open Government Initiatives**

The table below shows a list of initiatives for MBDA.

Table 9 - MBDA Initiatives

Operating Unit	Project	Status	Estimated Completion
MBDA	MBDA Online CRM/Performance Database System	Ongoing / Continuous	
	MBDA Chatbot	In Progress	September 2022

Project - Business Development Tools Modernization Project

What's new – Enhancement and redesign of MBDA's business development applications

MBDA uses Salesforce's cloud-based system to support its program performance management system. Operating as a Software-as-a-Service, the system assists MBDA's program areas with customer relations management and program performance reporting. The system supports individual MBDA Business and Specialty Centers service record management, including service accounts, service outcomes, and impact tracking. The system allows for client referral, client sharing, and performance sharing among Centers. The system provides Centers with the ability to track overall performance, as well as MBDA to track performance by program groups. The system also serves as an efficient, and flexible cloud-based solution for monitoring and developing customer relationships. The system security is monitored continuously and undergoes annual review of security controls and testing by a third-party entity. Complimenting the system is the Docu-Sign application that facilitates digital signatures on client engagement forms and agreements.

MBDA continues to identify and advanced technology that can be used to enhance customer assistance, engagement, referral, and experience. MBDA's Chatbot is a new system that will be added to its service tools to directly support MBEs. MBDA's Chatbot is built on an Azure cloud-based system and scheduled to be released in 2022Chatbot is designed to assist MBEs on mobile devices and offers users five categories of information and referral links to business resources, including MBDA's Business and Specialty Centers. MBDA Chatbot also features machine learning capability and is able to recognize open search phrases, questions, including those with misspellings. Overtime and as usage increase, the Chatbot will be able to discern good informational responses to users from less-than-optimal responses. MBDA will use data analytics available through the system to track popularity of selections and open text request for information. Further, the data will help MBDA to prioritize new content and user responses for improved engagements. Most importantly, MBDA's Chatbot will not capture or record any personally identifiable information or business identifiable information.



## National Institute of Standards and Technology (NIST)

NIST, founded in 1901, is a non-regulatory federal agency within the <u>Department of Commerce</u>. NIST's mission is to promote U.S. innovation and industrial competitiveness by advancing measurement science, standards, and technology in ways that enhance economic security and improve our quality of life.

# **Open Data**

### The Evidence Act

Public Law 115-435, Foundations for Evidence-Based Policymaking Act of 2018 (The Evidence Act), requires that federal agencies make strategic data assets accessible to the public in machine-readable formats and discoverable through a single, government-wide catalog. The Office of Science and Technology Policy (OSTP) had previously identified research data as a high-value federal asset, and NIST's efforts to make data public began with research data, as discussed below. NIST generates and collects other mission-related data assets that may already be publicly available (see, for example, <a href="https://www.nist.gov/tpo">https://www.nist.gov/tpo</a>), but which are not currently catalogued for discovery through <a href="https://data.gov">https://data.gov</a>. These assets will be inventoried and, if not already publicly available, will be prioritized by NIST's Chief Data Officer for release.

## Public Access to the Results of Federally Funded Research<sup>1</sup>

NIST developed a Public Access Plan in response to a February 22, 2013 memorandum from the Executive Office of the President on increasing access to the results of federally funded scientific research. The Plan was approved by the Office of Science and Technology Policy (OSTP) and the Office of Management and Budget (OMB) in December 2014. NIST staff are required to provide public access to the results of federally funded research under a set of NIST directives that went into effect in 2015. Language requiring provision of public access to scientific research results is

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<sup>&</sup>lt;sup>1</sup> Certain commercial products are identified here, but such identification is not intended to imply recommendation or endorsement by the National Institute of Standards and Technology, nor is it intended to imply that the products are necessarily the best available for the purpose.

included in agreements for research supported by NIST through grants, contracts, cooperative agreements, or other awards, including research conducted at joint institutes and federally funded research and development centers, as they come up for renewal. The plan and public comments are available as <a href="NISTIR 8084">NIST's Public Access Policy</a>, which was derived from the plan, is available at <a href="https://www.nist.gov/open">https://www.nist.gov/open</a>.

NIST has partnered with the National Institutes of Health (NIH) to use the <u>PubMed Central (PMC)</u> repository system to provide public access to full-text peer-reviewed scholarly publications authored by NIST staff, leveraging the well-established search, archival, and dissemination features of PMC. NIST Technical Series publications are available through the Government Publishing Office's (GPO's) <u>govinfo</u>. NIST also has a participation agreement with CHORUS, facilitating access to published papers.

To allow researchers to make data public, NIST has developed an infrastructure through which researchers' data management plans (DMPs) can be linked to records in NIST's Enterprise Data Inventory (EDI). The EDI allows researchers to upload datasets to a secure repository in the cloud, assign digital object identifiers (DOIs), and obtain the necessary review and approval prior to release of information to the public. Information about available data is sent through the Department to <a href="https://data.gov">https://data.gov</a>. NIST research data is accessible through links on data.gov and through a portal on NIST's website at <a href="https://data.nist.gov">https://data.nist.gov</a>. Software produced by NIST for research purposes is also discoverable through this portal and through https://code.nist.gov. Software may be distributed, for example, through NIST's GitHub repository at <a href="https://github.com/usnistgov">https://github.com/usnistgov</a> or through the NIST website.

Institutional membership in CrossRef, DataCite, and ORCiD allows NIST to use/access DOIs for authors, NIST Technical Series publications, and datasets, taking advantage of the evolving ecosystem of persistent identifiers that can link funders, authors, and research products.

Recognizing the importance of collaboration for scientific research efforts, NIST's CIO has authorized the use of multiple collaboration tools for sharing information with internal and external colleagues. Via an internal website, staff have access to lists of tools that are available for use and tools that are in the assessment and authorization process, making processes more transparent.

## **Improved Access to Archival Materials**

NIST, formerly the National Bureau of Standards (NBS), has worked with *The Internet Archive* under an arrangement with the Library of Congress to digitize nearly 25,000 technical reports the agency has published since it was established in 1901. As the publications are digitized, they are made accessible to the public through appropriate sources:

GPO *govinfo*, <a href="https://www.govinfo.gov/collection/nist">https://www.govinfo.gov/collection/nist</a> WorldCat, <a href="https://www.worldcat.org/">https://www.worldcat.org/</a>

The Internet Archive, <a href="https://archive.org/details/NISTresearchlibrary">https://archive.org/details/NISTresearchlibrary</a> Internet search engines

Photographs and other materials portraying NBS/NIST history are made available to the public through the NIST Digital Archives, <a href="https://www.nist.gov/digitalarchives">https://www.nist.gov/digitalarchives</a>. Information about and images of the scientific instruments and other artifacts in the NIST Museum collections are also accessible to the public through this site.

## **Configurable Data Curation System**

The NIST Configurable Data Curation System (CDCS), a platform developed to support the Materials Genome Initiative discussed below, provides a means for capturing and transforming data into a structured format that is XML-based and amenable to transformation to other formats so that the data can be shared across academia, the government, and industry. The platform was developed for materials data (as the Materials Data Curation System, MDCS), but is now also deployed as the NIST Materials Resource Registry (NMRR) as well as the International Metrology Resource Registry (IMRR), a tool for National Metrology Institutes (NMIs) and the International Bureau of Weights and Measures (BIPM) to expose the services and capabilities of the NMIs to a broad community of researchers, industrial partners, and government agencies, and allow the NMIs to better coordinate their research and development efforts through increased visibility of each other's activities. (NIST is the NMI of the United States.)

## **Proactive Disclosure**

To the extent feasible and consistent with law, agency mission, resource constraints, U.S. national, homeland, and economic security, NIST promotes the availability of results of federally funded research in publicly accessible repositories.

NIST has begun an initiative to make NIST directives of significant public interest available on our website.

# **Privacy**

NIST follows departmental guidance from the Office of Privacy and Open Government. NIST's privacy program is described at <a href="https://www.nist.gov/privacy">https://www.nist.gov/privacy</a>, and Privacy Impact Assessments are available at <a href="http://www.osec.doc.gov/opog/privacy/NIST-pias.html">http://www.osec.doc.gov/opog/privacy/NIST-pias.html</a>.

### **Whistleblower Protection**

NIST follows departmental guidance from the Office of Inspector General.

## Websites

Several years ago, as part of an effort to expand dissemination of its research results, NIST implemented Drupal, an open-source content management system (CMS), in which content is "tagged" by topic, enabling the public to subscribe to receive new information posted on the website on specific topics of interest such as nanotechnology or energy-related research. Currently, there are more than 395,000 subscribers who receive information on approximately 115 different topics. The NIST website also includes several blogs that allow members of the public to comment or ask questions about posted articles, and the CMS includes icons to easily share content from the NIST site with social media websites.

NIST has created sites on YouTube (more than 22,000 subscribers, more than 5 million video views), Facebook (more than 75,000 followers), Twitter (more than 75,000 followers), LinkedIn (more than 148,000 followers), and Instagram (more than 8,000 followers). NIST also has begun posting to Reddit and has created a Giphy account. To ensure that as many people as possible benefit from NIST's work, news of major research results posted on the NIST website is routinely announced through these additional social media sites.

## **Open Innovation Methods**

NIST uses prize competitions and challenges to stimulate engagement to solve ambitious problems in support of the NIST mission. Many long-standing NIST programs have created challenges by leveraging NIST authorities (e.g., the NIST Organic Act and Federal Information Security Management Act) to bring people together to advance research by providing an evaluation infrastructure; others have a winner who receives public recognition. Examples of recent and ongoing challenges include:

Global City Teams Challenge

NIST Transactive Energy Challenge

Text Retrieval Conference (TREC)

NIST prize competitions, involving the award of cash prizes to winners under Prize Competition Authority (15 U.S.C. 3719, as amended), are managed through NIST's Program Coordination Office. Prize competitions are announced on challenge.gov and program websites. Prize competitions completed or in progress include:

2018 Reusable Abstractions of Manufacturing Processes (RAMP) Challenge

The Unmanned Aerial Systems Flight and Payload Challenge

The Unlinkable Data Challenge - Advancing Methods in Differential Privacy

Differential Privacy Synthetic Data Challenge

Haptic Interfaces for Public Safety Challenge

Expanding the SIM Card Use for Public Safety Challenge

Tech to Protect Challenge

CHARIoT Challenge – Advancing First Responder Communications

First Responder UAS Endurance Challenge

Automated Streams Analysis for Public Safety (ASAPS) Prize Challenge: Contest 1

Enhancing Computer Vision for Public Safety Challenge

Differential Privacy Temporal Map Challenge

First Responder UAS Triple Challenge 3.1: FastFind - UAS Search Optimized

First Responder UAS Triple Challenge 3.2: Lifelink - UAS Data Relay

First Responder UAS Triple Challenge 3.3: Shields Up! Securing UAS Navigation and Control

The Mobile Fingerprinting Innovation Technology (mFIT) Challenge

First Responder Smart Tracking Challenge

2019 NIST Agile Robots for Industrial Automation Competition (ARIAC)

PerfLoc Prize Competition

Mask Innovation Challenge: Phase 2

Fusion of Face Recognition Algorithms

2021 Agile Robotics for Industrial Automation Competition (ARIAC)

#### Access to Scientific Data and Publications

NIST provides public access to scientific data through <a href="https://data.gov">https://data.gov</a> as well as a data portal on NIST's website, <a href="https://data.nist.gov">https://data.nist.gov</a>. Public source code is discoverable through these portals as well as through <a href="https://code.nist.gov">https://code.nist.gov</a>. Publications are available within 12 months of publication through the National Institutes of Health's PubMed Central at

https://www.ncbi.nlm.nih.gov/pmc/funder/nist/ and through the Government Publishing Office's govinfo at https://www.govinfo.gov/collection/nist.

### **Open Source Software**

Most programming code written at NIST is developed as part of our research programs and is developed to address specific and unique mission-related research problems. We openly share this software through <u>public Github repositories</u> for potential re-use by our stakeholders, including other researchers, and so that our research processes are fully open and transparent. Public source code/software is discoverable through <a href="https://data.gov">https://data.nist.gov</a>, and <a href="https://data.nist.gov">https://data.nist.gov</a>, and <a href="https://code.nist.gov">https://data.nist.gov</a>, and <a href="https://code.nist.gov">https://code.nist.gov</a>. <a href="https://code.nist.gov">NIST's Open Source Code</a> directive is also available on the NIST website.

### **Spending Information**

NIST spending information is available at <a href="https://www.nist.gov/about-nist/our-organization/budget-planning">https://www.nist.gov/about-nist/our-organization/budget-planning</a> and is embedded in Department of Commerce information on USAspending.gov.

### **Transparency**

NIST strives to be consistently open and transparent in its interactions with the public and news media. Information from and about NIST is available on <a href="mailto:analytics.usa.gov">analytics.usa.gov</a>, <a href="mailto:challenge.gov">challenge.gov</a>, <a href="mailto:data.gov/dashboard">data.gov</a>, <a href="mailto:grants.gov">grants.gov</a>, <a href="mailto:ITdashboard.gov">ITdashboard.gov</a>, <a href="mailto:labs.data.gov/dashboard">labs.data.gov/dashboard</a>, <a href="mailto:usa.gov">usa.gov</a>, <a href="mailto:USAspending.gov">USAspending.gov</a> as well as on the <a href="mailto:NIST website">NIST website</a> and social media, and in news releases, publications, and reports. In some cases, <a href="mailto:NIST">NIST information</a> is embedded in Department of Commerce information.

NIST follows the <u>Department of Commerce Public Communications Policy</u>, which includes explicit approval for research staff to talk with the news media and the public directly – without prior permission from the Public Affairs Office – about the results of their peer-reviewed research.

NIST's Public Affairs Office regularly offers communications training to NIST research staff, including describing this portion of the policy, to ensure that they are committed to broadly disseminating NIST results to a wide variety of audiences. Plain language training is available online and through mentoring and in-person training of NIST employees.

NIST provides a dedicated referral service for phone and email public inquiries during all business hours to ensure that any member of the public may request assistance in locating specialized technical reports or experts or in resolving customer service concerns they may have. The NIST website "Contact Us" page includes several different ways for the public to obtain help with many different types of inquiries. The Public Affairs Office strives to answer general NIST inquiries within 48 hours.

#### **Public Notice**

NIST follows departmental guidance from the Office of Public Affairs.

## **Records Management**

NIST manages its records in accordance with the National Archives and Records Administration (NARA) and Department of Commerce regulations, ensuring that records are economically and effectively created to meet business needs, kept long enough to protect rights and assure accountability, and preserved and available for future generations. Records are retained in accordance with NARA-approved records schedules. NIST's records management directives are clear and concise, conveying records management requirements and responsibilities to all NIST staff.

### Freedom of Information Act (FOIA) Requests

NIST responds to Freedom of Information Act requests in accordance with Department of Commerce regulations and Department of Justice guidance. NIST emphasizes the importance of transparency of its operations and regularly performs discretionary releases of documents and information that could qualify for exemption from release, but for which there is no foreseeable harm. The NIST FOIA Office works collaboratively with NIST Operating Units to obtain information in response to requests in a timely manner and to encourage proactive disclosure of information.

# **Congressional Requests**

NIST follows Department of Commerce guidance from the Office of Legislative and Intergovernmental Affairs.

#### **Declassification**

NIST follows Department of Commerce guidance from the Office of the Secretary.

# **Participation**

NIST has a rich history of connecting our technological advances to the American economy through interactions with stakeholders and the public, some of which are described in an <u>annual report on technology transfer</u>. Technology transfer plays an important role in the Department of Commerce's mission to promote job creation, economic growth, sustainable development, and improved standards of living for all Americans. NIST works in partnership with academia, businesses, state and local governments, other federal agencies, and communities to promote innovation and improve the nation's overall competitiveness in the global economy. NIST

publishes guidelines for staff participating in standards development activities, and in 2021, published guidance related to the use of inclusive language in documentary standards.

To increase citizen involvement in the development of standards to address new technological challenges, NIST has reached out to stakeholder communities to convene workshops at key locations around the country, organize diverse stakeholder groups, and establish consensus-developing organizations. This strategy has been used successfully for developing standards frameworks for the smart grid sector, critical infrastructure cybersecurity, disaster resilience, and forensic standards.

#### Framework for Improving Critical Infrastructure Cybersecurity

Starting in 2013, NIST worked with stakeholders to develop a voluntary framework – based on existing standards, guidelines, and practices – for reducing cyber risks to critical infrastructure. The first version of the Framework for Improving Critical Infrastructure Cybersecurity was released on February 12, 2014. Since then, NIST has collected user feedback and experience through Requests for Information and public workshops. NIST also facilitated working sessions on specific technical areas that have been used to enhance the Framework. On April 16, 2018, NIST published the <u>final Version 1.1 of the Framework for Improving Critical Infrastructure Cybersecurity (Framework)</u>. Among other refinements and enhancements, the document provides a more comprehensive treatment of identity management and additional description of how to manage supply chain cybersecurity.

#### **Privacy Engineering**

The NIST Privacy Engineering Program (PEP) supports the development of trustworthy information systems by applying measurement science and system engineering principles to the creation of frameworks, risk models, guidance, tools, and standards that protect privacy and, by extension, civil liberties. In January 2017, the PEP reached a major milestone in advancing the development of privacy engineering and risk management processes with the finalization of NISTIR 8062, *An Introduction to Privacy Engineering and Risk Management in Federal Systems*. NISTIR 8062 introduced the concept of applying systems engineering practices to privacy and provides a new model for conducting privacy risk assessments on federal systems. To develop NISTIR 8062 and understand the activities and concepts required for effective privacy engineering, the PEP sought the perspectives and experiences of privacy experts across a variety of sectors in an open and transparent process, including hosting workshops, soliciting public comments, and engaging stakeholders in outreach activities in a broad range of settings.

To help organizations meet the challenge of designing, operating, and using technologies in ways that are mindful of diverse privacy needs in an increasingly connected and complex environment NIST led a public-private partnership to develop a Privacy Framework. The Framework was the result of a robust, transparent, consensus-based collaboration with private and public sector

stakeholders that began in September 2018. To develop this tool, NIST released iterative drafts of the Framework and collected feedback through three public workshops, a request for information, a request for comment, five webinars, and many direct interactions with stakeholders. NIST published Version 1.0 of the Privacy Framework on January 16, 2020, and the framework was rolled out at a public event at the Center for Strategic and International Studies on February 19, 2020. The Privacy Framework is a voluntary tool intended to help organizations identify and manage privacy risk to build innovative products and services while protecting individuals' privacy. The Privacy Framework approach to privacy risk is to consider privacy events as potential problems individuals could experience arising from system, product, or service operations with data, whether in digital or non-digital form, through a complete lifecycle from data collection through disposal.

#### **Artificial Intelligence (AI)**

NIST has been working with the AI community to identify the technical requirements needed to cultivate trust that AI systems are accurate and reliable, safe and secure, explainable, and free from bias. This is important to build trust in AI technologies and to promote the adoption of new AI technologies.

The Plan for Federal Engagement in AI Technical Standards that NIST released in August 2019 (drafted pursuant to the Executive Order on Maintaining American Leadership in Artificial Intelligence) is the product of significant input from other federal agencies and the public. The plan recommends that the federal government "commit to deeper, consistent, long-term engagement" in activities to help the United States speed the pace of reliable, robust, and trustworthy AI technology development. NIST received comments from more than 40 organizations in industry, academia, and government on a draft plan released July 2, 2019. The report lists existing IT standards applicable to AI, and ongoing activities regarding AI standards and related tools. The plan recommends that the federal government bolster AI standards-related knowledge, leadership, and coordination among agencies that develop or use AI; promote focused research on the trustworthiness of AI systems; support and expand public-private partnerships; and engage with international parties.

In 2021, NIST posted a Request for Information (RFI) in the <u>Federal Register</u> to help NIST draft an Artificial Intelligence Risk Management Framework (AI RMF), a guidance document for voluntary use intended to help technology developers, users and evaluators improve the trustworthiness of AI systems. A draft AI RMP was posted for public comment in 2022. The draft AI RMF will answer a <u>direction from Congress</u> for NIST to develop the framework, and it also forms part of NIST's response to the <u>Executive Order</u>. More information is available on the <u>NIST</u> website.

#### **Organization for Scientific Area Committees for Forensic Science**

The Organization of Scientific Area Committees for Forensic Science (OSAC) is an initiative focused on strengthening forensic science in the United States. OSAC provides technical leadership to facilitate the development and promulgation of consensus-based documentary standards and guidelines for forensic science that are fit for purpose and based on sound scientific principles. OSAC is uniquely qualified to undertake this mission because of the deep and varied expertise of its members. OSAC consists of more than 450 members and 300 affiliates representing key stakeholder groups, including practitioners, laboratory managers, academic researchers, metrologists, statisticians, human factors experts, accreditation and standards development experts, attorneys, and judges. This diverse group represents federal, state, and local agencies, academic institutions, and private sector entities from all 50 states and more than a dozen nations.

OSAC continues to make steady progress toward its goal of achieving technically sound, consensus-based standards and guidelines and encouraging their adoption by the forensic science community. OSAC committees are working on hundreds of discipline-specific and interdisciplinary forensic science standards projects, have posted hundreds of discipline-specific baseline documents to the <u>OSAC website</u>, and have recently identified over 140 research and development needs.

Most recently OSAC launched a new subcommittee that will draft standards for collecting physical evidence from victims of sexual assault. The goal of the new standards will be to improve the quality of care for victims and help ensure that evidence is properly collected and preserved until a crime lab can analyze it.

#### **Community Resilience Planning Guide**

NIST's Community Resilience Planning Guide for Buildings and Infrastructure Systems provides a practical and flexible approach to help all communities improve their resilience by setting priorities and allocating resources to manage risks for their prevailing hazards. Using the Guide can help communities to integrate consistent resilience goals into their comprehensive, economic development, zoning, mitigation, and other local planning activities that impact buildings, public utilities, and other infrastructure systems. The Guide was released in late 2015 and is being supplemented by Guide Briefs with more information on supporting methods and best practices.

#### **Big Data Public Working Group**

Big Data is another important area in which NIST is leading public participation in standards development. Although there is broad agreement about the remarkable potential of "Big Data" to spark innovation, fuel commerce, and drive progress, the rate at which data volumes, speeds, and complexity are growing is outpacing scientific and technological advances in data analytics, management, and transport.

NIST is leading the NIST Big Data Public Working Group (NBD-PWG) to develop consensus definitions, taxonomies, reference architectures, and technology roadmaps to accelerate the deployment of robust Big Data solutions. The NBD-PWG, open to the public with active membership from industry, academia, and government, has five subgroups that have developed the NIST Big Data Interoperability Framework (NBDIF). The goal is to create vendor-neutral, technology- and infrastructure-agnostic systems to enable data scientists to perform analytics processing for their given data sources without worrying about the underlying computing environment. The NBDIF has been released in three versions, which correspond to the three stages of the NBD-PWG work with respect to the NIST Big Data Reference Architecture (NBDRA). In Stage 1, we identified the high-level NBDRA key components (seven volumes were published on September 16, 2015). In Stage 2, we created the general interfaces between the NBDRA components and enhanced Version 1 content (two new volumes added). For Stage 3, the aim was to validate the NBDRA by building Big Data general applications through the general interfaces. The final version of the nine-volume NBDIF was published in October 2019 with more than 80 contributors from more than 70 organizations.

NBD-PWG is exploring the level of interest from industry, government, and academia in extending the NBDIF for packaging scalable analytics as services to meet the challenges of so much information. These services would be reusable, deployable, and operational for Big Data, High-Performance Computing, and AI machine learning (ML) and deep learning (DL) applications, regardless of the underlying computing environment.

All NBDIF documents are available from the NIST website.

#### **Advisory Committees**

In addition to its existing advisory committees, NIST established three new advisory committees:

The <u>Internet of Things Advisory Board</u> will advise the Internet of Things Federal Working Group (IoTFWG) on the identification of any Federal regulations, statutes, grant practices, programs, budgetary or jurisdictional challenges, and other sector-specific policies that are inhibiting, or could inhibit, the development of the Internet of Things; situations in which the use of the Internet of Things is likely to deliver significant and scalable economic and societal benefits to the United States; and whether adequate spectrum is available to support the growing Internet of Things and what legal or regulatory barriers may exist to providing any spectrum needed in the future.

The <u>Industrial Advisory Committee</u> will advise the U.S. government on matters related to microelectronics research, development, manufacturing, and policy, providing recommendations on science and technology needs of the nation's domestic microelectronics industry; maintaining U.S. leadership in microelectronics manufacturing; assessment of the research and development programs and activities; and opportunities for new public-private partnerships to advance microelectronics research, development, and domestic manufacturing.

The <u>National Artificial Intelligence Advisory Committee</u> will advise the president and other federal agencies on a range of issues related to AI, providing recommendations on topics including the current state of U.S. AI competitiveness; progress in implementing the Initiative; the state of science around AI; issues related to the AI workforce; how to leverage Initiative resources; the need to update the Initiative; the balance of activities and funding across the Initiative; the adequacy of the National AI R&D strategic plan; management, coordination, and activities of the Initiative; adequacy of addressing societal issues; opportunities for international cooperation; issues related to accountability and legal rights; and how AI can enhance opportunities for diverse geographic regions.

#### **Education**

NIST has several partnerships and programs related to science, technology, engineering, and mathematics (STEM) education and workforce and business development. NIST welcomes postdoctoral associates identified through a competitive program administered by the National Research Council as well as students participating in the Graduate Student Measurement Science and Engineering Fellowship Program, the Summer Undergraduate Research Fellowship (SURF) Program, and the Summer High School Internship Program (SHIP). Additionally, the Professional Research Experience Program (PREP) provides lab experience to undergraduate, graduate, and post-graduate students, and the NIST Summer Institute for Middle School Science Teachers provides instruction in cutting-edge research that is coordinated with a middle school curriculum.

Under the Standards Services Curricula Development Cooperative Agreement Program, recipients work with NIST to integrate instruction related to standards and standardization into undergraduate and graduate curriculums at U.S. colleges and universities. Standards provide industries and innovators with a common language that facilitates trade, simplifies transactions, and enables people to work together toward greater common goals that cut across disciplines and borders. NIST supports the development of standards by identifying areas where they are needed, convening stakeholders, and providing technical and scientific guidance and expertise to help stakeholder groups reach a consensus. In 2021, NIST made five awards for a total of approximately \$373,000 to support standards education in undergraduate and graduate level curricula. Since the program began in 2012, NIST's Standards Services Curricula Development Cooperative Agreement Program has received 214 applications and made 41 awards totaling over \$2.57 million.

Additionally, an <u>Education Portal</u> was developed during the COVID-19 pandemic as a mechanism to help educators and families. The <u>NIST Education site</u> is a hub for all things education across the agency. Content is free and available to all. Elements include quick links to the new <u>NIST Educational STEM Resource Registry (NEST-R)</u>, the <u>Metric Program</u>, experiential learning opportunities, and K-12 curriculum materials, including the <u>SI Superheroes</u>. Periodically, focused topics known as Featured Collections will rotate through. The <u>Weights and Measures collection</u> was designed to celebrate national Weights and Measures Week, held March 1-7, 2022.

#### **Metrics**

Performance related to open government is evaluated through quarterly metrics reported to the Department of Commerce on usage of websites; "posts," "views," and "tweets" on social media; and blog posts. FOIAs that have been closed are reported. Separately, metrics are collected for numbers of purchases of calibration services, Standard Reference Data, and Standard Reference Materials, and customer satisfaction is evaluated via surveys and customer contacts. The numbers of research papers, data, and code published by NIST staff are reported, as are the numbers of Cooperative Research and Development Agreements (CRADAs), patents, licenses, and research associates, participants, and postdocs. This information is included in NIST's annual report to OMB on technology transfer, required by 15 U.S.C. § 3710(f) and available online at <a href="https://www.nist.gov/tpo/department-commerce">https://www.nist.gov/tpo/department-commerce</a>.

#### **Collaborations**

To meet its mission in the face of rapidly evolving priority areas and a widening stakeholder base, NIST is increasingly partnering with academic, industrial, and governmental institutions. National priorities require the united efforts of diverse participants, and NIST has the unique convening power and technical independence to bring those participants together. Each year, NIST hosts about 2,700 associates and facility users who collaborate with its scientists. NIST works with over 1,300 manufacturing specialists around the country to help small and medium-sized manufacturers improve and grow. NIST has two user facilities available for both proprietary and non-proprietary research. Access to these facilities is generally provided on a first-come, first-served cost-reimbursable basis. In addition, NIST jointly operates research organizations explicitly established to promote the kind of cross-disciplinary collaborations that accelerate research results. And through a Partnership Intermediary Agreement, NIST and the Maryland Technology Development Corporation (TEDCO) work with researchers to turn promising NIST technologies and know-how into high-tech businesses.

NIST typically hosts as many as 100 conferences, workshops, symposia, and other meetings annually. Many are co-sponsored with other federal agencies, academic institutions, professional societies, or industry groups.

#### **Public Safety Communications Research**

Since 2002, NIST's Public Safety Communications Research program (PSCR) drives innovation and advancement of public safety communications technologies through cutting-edge research and development. PSCR works directly with public safety stakeholders and extramural researchers to address public safety's urgent need to access the same broadband communications and state-of-the-art technologies that consumers on commercial networks experience. In February 2012, the enactment of the Middle Class Tax Relief and Job Creation Act marked an unparalleled push toward next-generation technologies for public safety. The legislation contained landmark

provisions for the development and build out of the Nationwide Public Safety Broadband Network (NPSBN), a dedicated, interoperable network for emergency responders. The Public Safety Trust Fund (PSTF) was established to support the design and implementation of the Network. The Act charged NIST with utilizing up to \$300 million of PSTF allocations to establish an R&D program to support the development and deployment of NPSBN. PSCR's one-time PSTF funding is set to expire at the end of FY22. Starting in FY23, PSCR will use NIST appropriated funding to support important internal NIST research to advance communications projects critical to the Nation's first responders.

Stakeholder engagement is key to PSCR's success, collaborating with public safety practitioners – fire, police, and EMS, industry, academia, and local, state, and federal agencies to guide R&D initiatives. As part of its strategic approach, PSCR regularly shares information with its diverse stakeholder community for feedback, input, and guidance. Additionally, PSCR connects stakeholders through summits, roundtables, and working groups; since 2010, PSCR has convened thousands of stakeholders at its annual stakeholder meeting. PSCR continuously engages these communities and regularly communicates R&D progress and results through monthly webinars, publications, open data, conferences, and an online newsletter.

#### **National Cybersecurity Center of Excellence**

NIST's National Cybersecurity Center of Excellence (NCCoE) brings together experts from industry, government, and academia to develop and effectively transfer practical cybersecurity standards, technologies, and best practices to the nation's business sectors. By accelerating dissemination and use of standards, best practices, and integrated tools and technologies for protecting information technology assets and processes, the NCCoE fosters trust in U.S. business sectors and improvements to the overall security of the economy. The NCCoE supports implementation of existing cybersecurity guidelines and frameworks, serves as a technical resource for both public and private sectors, and contributes to the development of cybersecurity practices and practitioners.

Today, the NCCoE has programs working with the health care, energy, financial services, manufacturing, public safety, transportation, and retail sectors. In addition, the center is addressing challenges that cut across sectors, including mobile device security, software asset management, cloud security, identity management, internet of things, data integrity, and secure email.

#### **National Initiative for Cybersecurity Education**

Employers are struggling to find workers who have cybersecurity-related skills. The National Initiative for Cybersecurity Education (NICE) is a partnership between government, academia, and the private sector focused on cybersecurity education, training, and workforce development.

On November 13, 2017, the First Annual National Cybersecurity Career Awareness Week began with a kick-off event at the National Cybersecurity Center of Excellence. These events have continued, and have featured experts who speak about how the cybersecurity community can effectively reach and encourage more students to consider a future career in cybersecurity, how career development strategies can be utilized for college graduates seeking to land their first cybersecurity positions, and how current workers can transition into this exciting field. The National Cybersecurity Career Awareness Week Cybersecurity Challenge was also launched to ignite interest in cybersecurity careers by enabling participants to test drive cybersecurity careers.

NICE, Burning Glass Technologies, and the Computing Technology Industry Association have developed an interactive map, <u>CyberSeek</u>. Cybersecurity talent gaps exist across the country. Closing these gaps requires detailed knowledge of the cybersecurity workforce in each region. CyberSeek is an interactive heat map that provides a snapshot of supply and demand data for cybersecurity jobs at the state and metropolitan area levels, and career pathways for cybersecurity positions. CyberSeek can be used by students, educators, career counselors, and employers looking to identify or develop skills needed in cybersecurity careers.

#### **Centers of Excellence**

NIST has also created Centers of Excellence to provide an interdisciplinary environment where researchers from NIST, academia, and industry collaborate on emerging areas of basic and applied research and innovations in measurement science. The first of these centers, the Center for Hierarchical Materials Design (CHiMaD), was established in 2013 to accelerate materials discovery and development; provide opportunities to transition new breakthroughs in advanced materials to industry; convene multidisciplinary and multi-sector communities for in-depth discussions; and provide training opportunities for scientists and engineers in materials metrology.

Two Centers of Excellence were established in 2015 after selection through a merit-based competition. The <u>Center for Risk-Based Community Resilience Planning</u> focuses on tools to support community disaster resilience. The center works on developing integrated, systems-based computational models to assess community infrastructure resilience and guide community-level resilience investment decisions. The center also provides a scientific basis for developing resilience metrics and decision-making tools and for evaluating cascading effects that arise in interconnected physical and social infrastructures.

The <u>Center for Statistics and Applications in Forensic Evidence</u> was announced in May of 2015. This center supports NIST's efforts to advance the utility of probabilistic methods to enhance forensic analysis. Working with NIST researchers and partners from four universities led by Iowa State University, the Forensic Science Center of Excellence evaluates and solidifies the statistical foundation for fingerprint, firearm, toolmark, and other pattern evidence analyses, and for multimedia evidence analyses. The center also develops and implements an education and training

program to ensure that judges, lawyers, and forensic science investigators can effectively decipher the results of statistical analysis on pattern and digital evidence.

#### **Materials Genome Initiative**

The Materials Genome Initiative (MGI) is a multi-agency initiative designed to create new policy, resources, and infrastructure to support U.S. institutions in the effort to discover, manufacture, and deploy advanced materials twice as fast, at a fraction of the cost. It can take 20 or more years to move a material after initial discovery to market because the discovery and optimization of new materials for innovative products is a laborious process, but computational design of materials has emerged as a powerful new tool for materials discovery and optimization. Major efforts in both theory and experiment are needed to provide the data that underlies successful modeling. Given its expertise in the integration, curation, and provisioning of critically evaluated data and models, NIST has assumed a leadership role within the MGI, establishing essential data exchange protocols and the means to ensure the quality of materials data and models. These efforts will yield the new methods, metrologies, and capabilities necessary for accelerated materials development.

#### **Quantum Economic Development Consortium (QED-C)**

The Quantum Economic Development Consortium (QED-C) aims to expand U.S. leadership in global quantum research and development and the emerging quantum industry in computing, communications, and sensing. Quantum technologies take advantage of the unusual rules that govern the behavior of the fundamental building blocks of matter, including electrons, protons, neutrons, and photons. With funding from both the government and private-sector member organizations, the QED-C will determine workforce needs essential to the development of quantum technologies; provide efficient public-private sector coordination; identify technology solutions for filling gaps in research or infrastructure; highlight use cases and grand challenges to accelerate development efforts; and foster sharing of IP, efficient supply chains, technology forecasting, and quantum literacy.

#### **Partnership Facilities**

In addition to the Centers of Excellence above, NIST collaborates in partnership facilities with academic institutions and other federal agencies.

#### **Brookhaven National Laboratory**

Brookhaven National Laboratory is a multipurpose research institution located on Long Island, New York. In partnership with Brookhaven, NIST develops and disseminates synchrotron measurement science and technology needed by U.S. industry to measure nanoscale electronic, chemical, and spatial structure of advanced materials.

#### **Hollings Marine Laboratory**

The Hollings Marine Laboratory (HML) is a joint research facility among NOAA's National Ocean Service, the South Carolina Department of Natural Resources, the College of Charleston, the Medical University of South Carolina, and NIST, with a mission to provide science and biotechnology applications to sustain, protect, and restore coastal ecosystems, with emphasis on links between environmental conditions and the health of marine organisms and humans.

#### **Institute for Bioscience and Biotechnology Research**

IBBR exists to foster integrated, cross-disciplinary team approaches to scientific discovery, translational development, and education, and to create commercialization relationships and initiatives that serve the expanding economic base of biosciences and technology in the state of Maryland and across the country.

#### Joint Center for Quantum Information and Computer Science

QuICS is a partnership between the University of Maryland and NIST to advance research and education in quantum computer science and quantum information theory.

#### **JILA**

JILA is a joint physics institute of the University of Colorado at Boulder and NIST. (The institute was previously known as the Joint Institute for Laboratory Astrophysics, but its current research now spans a wide range of physics topic areas).

#### **Joint Quantum Institute**

JQI is a joint institute of the University of Maryland, NIST, and the Laboratory for Physical Sciences in College Park, MD.

#### **National Advanced Spectrum and Communications Test Network**

NASTCN is a partnership among NIST, the National Telecommunications and Information Administration (NTIA), NOAA, NSF, NASA, and the Department of Defense, and is organizing a national network of federal, academic, and commercial test facilities that will provide the testing, modeling, and analyses needed to develop and deploy spectrum-sharing facilities.

## **Advanced Manufacturing National Program Office**

NIST provides leadership and coordination across federal agencies with programs in advanced manufacturing – including the Departments of Agriculture, Commerce, Defense, Education, Energy, Health and Human Services, and Labor, NASA, and NSF – by leading the interagency Advanced Manufacturing National Program Office (AMNPO). The AMNPO oversees the planning, management, and coordination of Manufacturing USA®, which brings together public and private investments to improve the competitiveness and productivity of U.S. manufacturing

through a robust network of manufacturing innovation institutes. Each of the 14 Manufacturing USA institutes is a public-private partnership focusing on a specific, promising area of advanced manufacturing technology.

The institutes advance domestic manufacturing innovation by creating the infrastructure needed to allow domestic industry and academia to work together to solve industry-relevant manufacturing problems in research and development, technology transition, workforce training, and education. Manufacturing USA has garnered significant attention in the manufacturing sector; two-thirds of the 1900 member organizations are manufacturers and 70 percent of those are small and medium-sized enterprises. Members also include Fortune 50 U.S. manufacturers and top-ranked research and engineering universities.

The AMNPO provides information to the public about Manufacturing USA through a variety of means — especially through the website, <a href="www.ManufacturingUSA.com">www.ManufacturingUSA.com</a>. The website includes news about the institutes, media exposure, announcements of <a href="upcoming events">upcoming events</a>, information about <a href="program funding opportunities">program funding opportunities</a>, videos, an archive of <a href="reports and policy papers">reports and policy papers</a>, and guidance about how to engage with the institutes. The AMNPO also releases an <a href="annual report on the program's performance">annual report on the program's performance</a> and a <a href="triennial strategic plan">triennial strategic plan</a>. The AMNPO maintains Twitter and LinkedIn accounts to communicate advanced manufacturing news and successes about Manufacturing USA to the public. Additionally, the AMNPO maintains the <a href="Manufacturing.gov">Manufacturing.gov</a> website, which contains links to information about U.S. government programs that support advanced manufacturing.

#### **NIST Technology Transfer**

NIST regularly works with multiple other organizations through Cooperative Research and Development Agreements. These agreements allow NIST to work directly with other parties through a public-private partnership to achieve specific scientific outcomes. In addition, NIST patents and licenses new technologies developed in our laboratories. NIST regularly organizes technology showcase events to bring together innovative technologies, licensable inventions, research and engineering facilities, small business support resources at the federal and state levels, and sources of funding, all under one roof. NIST also hosts "listening sessions" to hear from local communities about how federal labs can contribute to economic development. Information on NIST technologies available for licensing is on <a href="mailto:data.gov">data.gov</a> in a machine-readable format for other parties to use.

NIST regularly conducts economic assessments on the results of our research programs. NIST economic reports and assessments are available on the NIST website. Technology Transfer partnership activities across Commerce are described in an annual report. A selection of NIST activities with impacts in industry is also available.

#### **Interagency Technology Transfer**

NIST has an interagency leadership role in technology transfer as delegated by the Secretary of Commerce. NIST has worked with other agencies to place information on all federal laboratory technologies available for licensing and information on available research facilities and equipment on <u>data.gov</u> in a machine-readable format for other parties to use.

As part of NIST's leadership role, a Return on Investment (ROI) Initiative was begun in FY18 and concluded with the publication of a <u>NIST Green Paper in FY19</u>. Working collaboratively with other agencies, NIST received and analyzed information from the private sector, universities, and other partners to identify critically needed improvements to federal technology transfer efforts. Some findings are now in the process of being implemented through the National Science and Technology Council's Lab-to-Market subcommittee, and milestones are reported publicly through <u>performance.gov</u>. Our goal is to streamline and accelerate the transfer of technology from federal laboratories to promote U.S. economic growth and national security through innovative products and services as well as new businesses and industries.

#### **Small Business Innovation Research**

Small Business Innovation Research (SBIR) is a highly competitive federal grant program that opens opportunities and encourages U.S. owned and controlled small- and mid-sized businesses to engage in Research and Development (R&D) with commercialization potential.

#### **Manufacturing Extension Partnership (MEP)**

The MEP Program is a unique, public-private partnership that delivers comprehensive, proven solutions to U.S. manufacturers, fueling growth and advancing U.S. manufacturing. The MEP Centers in all 50 states and Puerto Rico, which are part of the MEP National Network™, work with U.S. manufacturers to develop new products and adopt new technologies. MEP National Network services can evolve with the maturity of a technology as well as help strengthen the business side of a company and can play a pivotal role in helping manufacturers move from concept to market through services in areas such as product design, manufacturing engineering, product concept testing, quality control/management, supplier scouting, and certification. The MEP Program serves as a bridge to other organizations and federal research labs that share a passion for enhancing the manufacturing community. From MEP's inception through FY 2018, the MEP Program has worked with 102,443 manufacturers, leading to \$127.3 billion in sales and \$20.5 billion in cost savings, and it has helped create and retain more than 1,107,346 jobs.

### **NIST Open Government Initiatives**

The table below shows a list of initiatives for NIST.

Table 10 - NIST Initiatives

Operating Unit	Project	Status	Estimated Completion
NIST	Modernization of Standard Reference Data	Ongoing/Continuous	
	Make Directives of Public Interest Available on NIST's Website	In Progress	September 2023
	Develop a Research Data Management Framework (RDaF)	In Progress	June 2023
	NIST Educational STEM Resource Registry (NEST-R)	Completed	
	TREC-COVID Challenge	Completed	
	Develop a Portal for NIST-Developed Code	Completed	

### Project - Modernization of Standard Reference Data (SRD) - Ongoing/Continuous

For more than 50 years, NIST has been making standard reference databases available for a broad range of chemical and physical properties for use in many scientific disciplines including biology, chemistry, engineering, forensics, materials science, and physics. Customer expectations for a "useable" data product have changed as technology has evolved. Most of the 100 databases are currently available as searchable tables. We are modernizing the look and feel of these databases and incorporating application programming interfaces (APIs) to make the databases easier to use and to allow access to the data through code rather than requiring users to perform multiple manual searches. To date, ten of the SRDs have been revamped with improved user interfaces. We also undertook an internal review of the entire SRD portfolio and reclassified and reorganized the collection to make clear which datasets fully satisfied the SRD criteria.

### Project – Make Directives of Public Interest Available on NIST's Website – In Progress

NIST continues to make progress on this project. Our internal Directives Management System is close to completing the migration of the Administrative Manual Subchapters with only nine remaining. Once complete, the implementation plan to deploy the directives will begin. Currently the NIST website contains seven directives.

#### Project - Develop a Research Data Management Framework (RDaF) - In Progress

NIST is working with stakeholders to develop a structured approach to data management, modeled on the process used to develop NIST's Cybersecurity Framework, to enable organizations to optimize use of their data assets. After a thorough review of current guidance, we will develop a common language and a basis for coordination across that landscape, developing a framework that describes who needs to do what, why, and when in order to make their data useful and maximize its value.

#### Project – NIST Educational STEM Resource Registry (NEST-R) – Completed

The NIST Educational STEM Resource Registry, NEST-R, is an online tool that allows educators, students, parents, and others to easily discover a variety of educational resources published by NIST staff across many program offices and websites. NEST-R is a great starting point for both formal and informal (out-of-school) educators, especially measurement science ambassadors, seeking to communicate science, technology, engineering, and mathematics (STEM) concepts and encouraging career pursuits through education outreach activities. Users search the registry using keywords and customizable filters to pinpoint resources including short videos, real-world applications, and internships. Each resource page includes a green box featuring metadata, such as resource type, format, school subject, and more. A blue box highlights teaching tips. Each resource also includes a permanent link to each record and a citation button, which makes lesson or outreach session planning easy.

## **Project – TREC-COVID Challenge – Completed**

Researchers, clinicians, and policy makers involved with the response to COVID-19 are constantly searching for reliable information on the virus and its impact. This presented a unique opportunity for the information retrieval and text processing communities to contribute to the response to this pandemic, as well as to study methods for quickly standing up information systems for similar future events.

TREC-COVID followed the <u>TREC</u> model for building test collections for information retrieval through community evaluations of search systems. The document set used in the challenge is the <u>COVID-19 Open Research Dataset (CORD-19)</u>. This is a collection of articles from the biomedical literature that is updated regularly. Accordingly, TREC-COVID consisted of a series of rounds, with each round using a larger version of the document set and a larger set of COVID-related topics. Participants in a round created ranked lists of documents for each topic ("runs") and submitted their runs to NIST. Based on the collective set of participants' runs, NIST created sets of documents to be assessed for relevance by human annotators with biomedical expertise. The results of the human annotation, known as relevance judgments, were then used to score the submitted runs.

The final document and topic sets together with the cumulative relevance judgments comprise a COVID test collection called <u>TREC-COVID Complete</u>. The incremental nature of the collection

as viewed through the successive rounds supports research on search systems for dynamic environments.

### Project – Develop a Portal for NIST-Developed Code – Completed

The <u>Federal Source Code Policy</u> is designed to support reuse and public access to custom-developed federal source code. It requires that source code developed by or for the federal government be made available for sharing and re-use. Most of the code produced by NIST is intended for research purposes, and is available via <u>GitHub</u> and in other locations. Using repurposed open source code from the Lawrence Livermore National Laboratory, we implemented the <u>code.nist.gov</u> web portal as a companion site to our data portal, <a href="https://data.nist.gov">https://data.nist.gov</a>. The code portal exports a code.json file for use by code.gov and allows users to locate and access NIST's code products.



### **National Oceanic and Atmospheric Administration (NOAA)**

From the depths of the ocean to the surface of the sun, NOAA is observing, measuring, monitoring, and collecting data — and translating those publicly available data into earth-system models, information, tools, and forecasts for public use. NOAA's trusted data are the basis for your daily weather forecast that you can access on your phone with a press of a button; feed into our models that predict the movement of wildfire smoke in real-time; and identify impacts of climate change on fisheries and living marine resources to improve management. NOAA's data, tools, and services support the national economy and touch all aspects of American life.

Since its inception in 1807, NOAA has evolved to meet the needs of a changing country from building a Climate Ready nation to fostering an Information-Based New Blue Economy. NOAA is working to address our Nation's most pressing challenges, from combatting the climate crisis and bolstering the equitable development and delivery of climate science and services; reinforcing scientific integrity and rebuilding our scientific workforce; ensuring our agency is diverse, equitable, inclusive, and accessible; to promoting economic development while maintaining environmental stewardship — the NOAA workforce has been firing on all cylinders to meet the increasing demands of our mission. That mission is science, service, and stewardship — to understand and predict changes in climate, weather, oceans, and coasts; to share that knowledge and information with others; and to conserve and manage coastal and marine ecosystems and resources.

NOAA provides a diverse range of science and services, ranging from daily weather forecasts and severe storm warnings to climate monitoring, fisheries management, coastal restoration, and support for marine commerce. All of these products and services promote economic vitality and affect more than one-third of America's gross domestic product.

# **Recent Accomplishments**

In support of the Open Government goals, NOAA has made notable progress in a number of the Open Government functional areas in FY21 and FY22, as highlighted below.

### **Open Data**

NOAA published its first-ever NOAA Data Strategy in August of 2020. The purpose of the NOAA Data Strategy is to dramatically accelerate the use of data across the agency and with other key partners, maximize openness and transparency, deliver on mission, and steward resources while protecting quality, integrity, security, privacy, and confidentiality. NOAA's Data Strategy will improve the management and overall value of NOAA's data, especially at a critical time when emerging science and technology have dramatically expanded the agency's data collection for the greater benefit to the agency, its partners, and the nation. The overall strategy is designed to serve as a framework for consistency that builds upon existing laws and regulations related to how NOAA uses and manages data, while being flexible and adaptable to external influences such as new policies, Executive Orders, stakeholder input, and new technologies that drive innovation within the agency. The NOAA Data Strategy builds upon NOAA policy, practices, and processes related to data and how we manage it. It also aligns with the 2019 release of Office of Management and Budget (OMB) Memorandum, M-19-18 Federal Data Strategy - A Framework for Consistency, the Federal Data Strategy's 2020 Action Plan, and builds upon statutes and OMB information policy and guidance, along with supplementary guidance on how agencies should manage and use Federal data. As with the Federal Data Strategy, the NOAA Data Strategy will constantly evolve to be regularly updated for consistency with new statutory or OMB information policy guidance.

The NOAA Data Strategy contains five goals:

- Goal 1: Align data management leadership roles across the organization
- Goal 2: Govern and manage data strategically to most effectively steward the US taxpayers' investment
- Goal 3: Share data as openly and widely as possible to promote maximum utilization of NOAA data
- Goal 4: Promote data innovation and quality improvements to facilitate science and support data-driven decision making
- Goal 5: Engage stakeholders and leverage partnerships to maximize the value of NOAA data to the Nation

In FY2022, NOAA then approved its NOAA Data Strategic Action Plan. The NOAA Data Strategic Action Plan outlines a five-year execution timeline applying to fiscal years (FY) FY22 through FY26. Milestones and deliverables have been set for every action, each linked to one or more of the Strategy objectives. This Strategic Action Plan reflects the many levels of collaboration within the NOAA data community. Teams from across Line Offices (LO)collaborated to create a strategic implementation (action) plan with a set agenda and priorities. These cross-NOAA collaborations will continue to regularly update this action plan as needed. The NOAA Data Strategic Action Plan lays out how the NOAA Chief Data Officer (CDO) and

bodies such as the NOAA Data Governance Committee (DGC) will make progress toward the goals and objectives of the Data Strategy while leveraging expertise and established groups in NOAA Line Offices and Staff Offices. The NOAA CDO will ultimately oversee the execution of the Data Strategic Action Plan. NOAA identified 12 priority actions for FY22–23:

Governance: Establish the NOAA CDO structure Governance: Formalize LO data governance roles

Governance: Establish a NOAA Data Governance Body

Governance: Socialize and promote the NOAA Data Governance

Policy: Update the NOAA Data Policy Directives Policy: Develop NOAA data licensing guidance

Workforce: Assess and report NOAA's data program maturity Workforce: Assess and increase staff data literacy and skills

Open Data: Develop a NOAA Open Data Plan

Open Data: Assess baseline compliance with Open Data requirements

Open Data: Maintain a comprehensive NOAA data inventory

Metrics: Track the use of NOAA data

In FY2022, NOAA took a number of critical steps to update its data governance and management approaches. The NOAA Data Governance Committee (DGC) was formed in 2022 to meet legislative, federal, and administration data governance requirements, as well as to address NOAA data opportunities. The purpose of the DGC is to enable NOAA to maximize the value of its data assets through sound and coordinated data governance and management practices. The DGC coordinates the implementation of the NOAA Data Strategy, including oversight of policies that ensure NOAA data assets are strategically and efficiently managed on behalf of the NOAA enterprise. NOAA Administrative Order (NAO) 212-15 gives the DGC "authority to develop and approve Procedural Directives relevant to management of NOAA data and information". The DGC complies with the federal policies and strategies, as well as NOAA administrative orders and directives. The DGC reports to the NOAA Observing Systems Council (NOSC) and NOAA (Chief Information Officer (CIO) Council.

The Data Governance Committee has chartered a number of working groups and task teams to carry out the critical implementation priorities of the NOAA Data Strategy and Action Plan. The use of working groups and task teams builds out the active membership and engagement opportunities for all staff across the organization, in both the mission and operation-support offices. The list of working groups and task teams includes:

Working Groups (WG)

NOAA Geographic Information Services (GIS) WG

NOAA Enterprise Metadata WG

Government Information Services WG

Data Innovation WG

Environmental Data Management Workshop WG

Data Communications WG

Task Teams (TT)

Data Digital Object Identifier (DOI) TT

Data Licensing TT

Environmental Data Policy TT

Data Catalog TT

Workforce Development TT

NOAA is also in the process of establishing line office Assistant Chief Data Officers (ACDO). The ACDO will lead data governance within the Line Office, working in close collaboration leadership and data program staff. The ACDO will coordinate the implementation of the NOAA Data Strategy within the Line Office, including oversight of policies that ensure NOAA data assets are strategically and efficiently managed on behalf of the NOAA enterprise, maximizing the value of NOAA's data assets through sound and coordinated data governance and management practices. The ACDO's will be the Principal Members on the NOAA Data Governance Committee.

Lastly, NOAA has continued to build out the NOAA Data Program (NDP) within the Office of the Chief Information Officer. The NDP is led by the NOAA Chief Data Officer and is responsible for a suite of open government functions and projects including:

Freedom of Information Act (FOIA)

Privacy Act

Paperwork Reduction Act (PRA)

Information Quality Act (IQA)

Evidence Act and OPEN Data Requirements

Geospatial Data Act (GDA) and Geographic Information System Officer Leadership

NOAA Open Data Dissemination (NODD)

### **Privacy**

NOAA Privacy collaborated with the Cybersecurity Division (CSD) to craft and issue NOAA's first Controlled Unclassified Information (CUI) Policy. The Policy, premised on Executive Order 13556, outlines the proper use, storage, marking, and handling of CUI within the Bureau. It incorporates by reference the DOC CUI Policy, and particularly addresses the unique types of CUI relied on within NOAA, including NOAA's critical PII assets.

Throughout this policy promulgation, Privacy data was recognized by NOAA as a crucial component of any CUI program, including the crafting of role-based CUI training. NOAA Privacy collaborated to create and make this training available throughout NOAA once the Policy becomes effective.

This cooperation between CSD and NOAA Privacy extends a vital ongoing relationship that recognizes the growing interwoven responsibilities of Privacy and Cybersecurity in securing NOAA's sensitive datasets and ensuring that those datasets abide by the protections that are unique to the nature of the data. For Privacy data, these requirements are very specific, and are incorporated into the larger security controls within NIST 800-53 Rev. 5.

NOAA's CUI Policy directly identifies certain datasets — such as Privacy datasets — that are recognized as having their own requirements for use, storage, and transmission, and those requirements are built into the CUI framework.

# Freedom of Information Act (FOIA) Requests

NOAA has successfully focused on the reduction of its litigation burden, since its peak from FY2020–FY2021. At its peak, NOAA had 23 active FOIA lawsuits, with limited staff available to respond to the growing request and case-load burden.

However, since that time, NOAA has significantly increased its production capability, dedicated resources to records processing, and focused on enhancing efforts towards faster litigation response. To that end, NOAA organized "Tiger Teams" of FOIA personnel who can be shifted for litigation processing from Office-to-Office depending on the ebb and flow of record production schedules. Because litigation and backlog productions can shift with the variance of public interest in an Office's records type, the Tiger Team structure has allowed NOAA to be agile in processing records with a nimble team of processors, rather than compelling production with existing staff in Offices where request volume is sporadic and unpredictable. This effort has allowed NOAA, through Direct Bill funding, to decrease its FOIA litigation load by 57%, increasing NOAA's transparency and improving its responsiveness in producing some of NOAA's most visible records sets sought by the public.

### Paperwork Reduction Act (PRA)

NOAA successfully created and received OMB approval for a new hybrid-generic information collection for the Socioeconomics of Coral Reef Conservation data, making it one of the first agencies to use this new tool. The use of a hybrid-generic information collection will allow NOAA to use a hybrid-generic umbrella collection to obtain expedited review and approval by OMB for individual collections submitted under the umbrella collection. The PRA process, which generally takes 6-8 months to complete, is reduced to approximately two months using the hybrid-generic umbrella collection. NOAA is in the process of creating a second hybrid-generic to collect commercial and charter sector economic data for NOAA Fisheries, making it easier for Fisheries to meet the mandate of the Magnuson-Stevens Act.

#### **Public Notice**

NOAA responded quickly and efficiently to the COVID-19 pandemic, recognizing the need for PII collections reflecting COVID testing results, as well as vaccination status. This response included the expedited publication of a critical System of Records to facilitate this essential public health collection. NOAA proposed a System of Records Notice (SORN) to the Department of Commerce, facilitating the collection of these crucial records to allow COVID response, vaccination status confirmation, and aiding in the transition back to in-office work. The Department recognized and agreed with the value added by this essential SORN, and adopted NOAA's proposed publication Department-wide. On November 18, 2021, the Department published DEPT-31, "Public Health Emergency Records of Employees, Visitors, and Other Individuals at Department Locations." This SORN laid the Privacy Act compliance foundation for essential COVID screening document collections, vaccination artifacts, and COVID testing records to be collected and stored, consistent with Privacy principles, to effectuate a safe and healthy workplace environment, directly in line with the guidance from the Safer Federal Workforce Task Force.

#### Websites

NOAA continues to advance our citizen-focused approach to providing access to our content, information and products provided by our Line Office sites within the NOAA.gov domain. The NOAA.gov site continues to rank in the top 10 of the top accessed Federal Websites, logging over 100 million hits annually. The site, following the 2016 redesign, provides a front door to news and information across ten focus areas and linked to dozens of sites across the NOAA.gov subdomain. In 2021, additional technology updates increased our general content management capabilities, allowing an expansion to host cross-NOAA content in a central location. The design refresh integrated the U.S. Web Design System to provide a more cohesive presentation and ensure visitors understand they are on a U.S. Government site. These improvements allow subject matter experts to manage content directly in a central location, thus reducing the need for additional technology, reducing our security footprint, taking advantage of enterprise tools to manage

accessibility, assuring content quality, increasing findability through standardized SEO practices, and ensuring accessibility to make our content available to as many communities as possible.

#### NOAA.gov site refresh

The 2016 NOAA.gov site redesign created a space for communicating news and information in support of NOAA's vast and important mission areas. In 2021, the content management technology was updated to the Drupal 9 platform with increased capabilities to host cross-NOAA content for our interagency partnerships and working groups and specific information portals to aggregate content from across NOAA to a single group of pages. This increases the findability and usability of content across NOAA making NOAA.gov the true front door to NOAA information, resources and products.

### NOAA Corporate Web Transformation

All NOAA staff and corporate public communications have been consolidated to NOAA.gov from individual NOAA websites and internal content has been moved to our Google Sites platform. This increases the findability and usability of information resources by our public customers, providing greater focus and access to content for all customers.

## **NOAA Open Government Initiatives**

The table below shows a list of initiatives for NOAA.

Table 11 - NOAA Initiatives

Operating Unit	Project	Status	Estimated Completion
NOAA	NOAA Big Data Partnership	Live / Operational	
	NOAA OneStop Data Discovery and Access Framework	Live / Operational	
	NOAA.gov	Live / Operational	
	Empowering the Public to Contribute to NOAA's Mission through Citizen Science	Live / Operational	
	CrowdMag, Non-traditional Observing of Earth's Magnetic Field	Ongoing / Continuous	
	Crowdsourced Bathymetry	Ongoing / Continuous	
	Climate.gov Portal	Ongoing / Continuous	
	Digital Object Identifiers	Live / Operational	
	Local Climatological Data (LCD)	Live / Operational	
	Integrated Severe Weather Data via GIS Map Interface	Live / Operational	

Data Visualization Capabilities for Global Summary Data	Live / Operational	
NOAA Wireless Emergency Alerts (WEA) and Common Alerting Protocol (CAP)	Live / Operational	

#### Project: Big Data Program (Flagship project)

From April 2015 - May 2019, the <u>Big Data Program</u> explored the feasibility of using public-private partnerships to publish NOAA's vast open data resources, and increase their use by incorporating them into cloud-based computing, analytic, and storage services provided by the private sector. This collaboration combined NOAA's tremendous volume of high-quality environmental data and private industry's vast infrastructure and technical capacity to create a sustainable, market-driven ecosystem that lowers the cost barrier to the utilization of NOAA's data. By promoting wider dissemination and lowering the barriers to use, this project demonstrably created new economic opportunities without using additional tax dollars.

The CRADA portion of the Big Data Program ended in May 2019. Subsequent to that, NOAA released a Request for Proposals (RFP) that encompassed the provisions of the CRADA phase as well as egress concessions and a minimum of five (5) petabytes (per contract award) of allocated storage for which NOAA determines which datasets are hosted. Amazon Web Services (AWS), Google, and Microsoft were awarded BDP contracts based upon their responses to the RFP.

NOAA has published over 130 additional datasets through the Big Data Program contract awardees, such as its National Water Model retrospective analysis, GOES 16 and GOES 17 satellite imagery, with many other data sets under discussion, including coastal water level, genomics, and fisheries catch data. The Program has seen expanded use of NOAA datasets on commercial cloud platforms from traditional users, while also witnessing a rapidly expanding small business sector which has embraced the business opportunities provided by having NOAA low latency data products available on highly scalable compute platforms.

These partnerships were originally created through CRADAs with Amazon Web Services (AWS), Google Cloud Platform, Microsoft, IBM, and the Open Commons Consortium. The CRADA collaborators provided NOAA's open data at no net cost to anyone that wants them. This provision was particularly instrumental in allowing interested private third parties to leverage their cloud computing capabilities to develop "big data" value-added products and services which they may monetize. Additionally, the CRADA allowed NOAA to avoid costs for its on-premises data delivery systems, which allowed the BDP to operate at no net cost to the taxpayer.

Early results indicated that the CRADA model is effective for democratizing and increasing access to NOAA open datasets. Over the course of one (1)-year, Amazon Web Services' (AWS) hosting

of the complete NOAA Next-Generation Weather Radar (NEXRAD) dataset has generated 2.3 times the dissemination previously seen from NOAA systems and reduced loads on NOAA systems by 50%. Users can now utilize the entire dataset at once without downloading data, and 50% of AWS users are doing just that, allowing AWS to generate revenue to support this service.

Google's hosting of NOAA's Global Historical Climate Network and Global Surface Summary of the Day datasets, that in total are less than 10 gigabytes in size, within Google's BigQuery tool has produced over 1,200,000 gigabytes of data usage in just four (4) months. This vast scale of data dissemination is attributable to the greatly increased accessibility and ease of use of the Google tools by an audience that is much wider than the traditional meteorology community. Google is now hosting NOAA climate forecasts, satellite imagery, weather radar measurements, historical hurricane tracks, and severe weather reports from their BigQuery, Cloud Platform, and Earth Engine tools.

The BDP team cooperatively hosts information sessions with Cloud Service Providers (CSPs) and members of the public using BDP data assets. These involve inviting a NOAA subject matter expert to present on a hosted NOAA datasets and answer questions. The BDP also regularly presents at scientific and industry conferences to make users aware of the Program and answer questions as to how they can participate. In February 2020, the BDP participated in a Roundtable with the Center for Open Data Enterprise, and other partners, including Ocean Conservancy, Esri, Microsoft, and Amazon, on putting NOAA's Ocean Data to Use. The purpose of the Roundtable was to introduce the CSPs to the Ocean community and develop a list of priority datasets for inclusion on the BDP. Future activities will include User Engagement, to ensure that Users' needs are considered. In addition, the BDP maintains a website containing information on the program, a list of hosted datasets, and contact information for how to get in touch with BDP staff. NOAA also has the BDP contact information listed on CSP dataset description pages as an additional means of getting in touch with program staff. BDP Staff frequently address users' questions/concerns and interact via the NOAA BDP contact email, Github, and social media.

#### Project: NOAA OneStop Data Discovery and Access Framework

Enabling Users to Discover and Access NOAA Data with OneStop

OneStop provides improved public discovery and access for NOAA data. The 2.0 release in 2019 supports users in finding and accessing over 26,000 archived data collections at NOAA. OneStop is in the process of replacing the existing NOAA Data Catalog to support access to all of NOAA's environmental data. OneStop leverages datasets improved by the Big Earth Data Initiative (BEDI) and includes datasets that have been cloud-enabled by the NOAA BDP. Third-party professional usability testing found that 83% of users preferred the new OneStop User Interface over the current NOAA Data Catalog interface.

OneStop builds on existing portal and web services while also infusing specific innovations to support the breadth and scale of NOAA's Big Data. The project has enabled an Open Data platform for NOAA, with robust storage solutions at the base, supporting interoperable access serviced, world-class metadata management, and standards-based discovery services following the recommendations of the USGEO Data Management Working Group's Common Framework for Earth Observing Data. In addition, OneStop developed and documented best practices for data formats and metadata content so that the various component web services are able to search, discover and display the data and metadata with a high degree of quality, consistency, and visual appeal. The user interface was built to take advantage of the high quality and consistent information presented via the web services to provide a seamless, smooth, and modern user data discovery experience. NOAA OneStop was developed and implemented by the NOAA National Centers for Environmental Information (NCEI).

#### Project: NOAA.gov

The <a href="www.noaa.gov">www.noaa.gov</a> website serves as the primary public face of the NOAA organization. The site logs nearly 100 million visits annually and is consistently one (1) of the top accessed Federal Websites. The site connects visitors to NOAA's most requested mission-related information through focus area pages, news, and features from across NOAA. In 2019 and 2020 the site continued to evolve and expand to include more program and corporate office content directly hosted within the Drupal 7 content management framework. In 2020, development is underway to upgrade to the Drupal 8 framework, integrate the presentation of the U.S. Web Design System, and continue to expand capabilities to host programmatic information and resources from across the NOAA enterprise.

In addition to the <a href="www.noaa.gov">www.noaa.gov</a> site, NOAA.gov has many subdomains providing data, information, and resources across NOAA's mission and corporate focus areas. Many of these subdomains have been in existence for decades. After years of managing our organically derived and organizationally focused web presence, 2019 marked a turning point toward a more consolidated and citizen and customer-focused approach. Beginning with the <a href="www.noaa.gov">www.noaa.gov</a> redesign in 2016, NOAA has undertaken a multi-year initiative to transform 98 web domains and their related web sites into a more consistent offering targeting the needs of our public audience, our partners, and our internal staff.

Much of the content has been moved to internal Google sites leaving only content of direct use to citizens, our partners in the private and academic sectors as well as our colleagues in other agencies.

Public content is available on the NOAA.gov platform using Drupal 7 as the foundation providing a consistent presentation, organization, and access to the content by visitors and is easily accessible for content maintenance by managers and editors.

As of April 2020, 72% of the sites have been consolidated with a plan to address the rest by the end of the fiscal year leaving three (3) final domains, one (1) external and two (2) internal.

NOAA.gov as a singular website and a broader domain will continue to mature to meet our mission and customer experience goals. The coming year will bring further transformation and efficiencies, ensuring that NOAA's data and information resources are easy to find and accessible to all.

#### Project: Empowering the Public to Contribute to NOAA's Mission through Citizen Science

Through citizen science and crowdsourcing, volunteers are able to do more than just read about NOAA science, they are able to contribute to it. While NOAA has a rich tradition of supporting citizen science, the agency is continuing to grow and evolve its portfolio of projects. Coordination within the agency is accomplished through the <u>NOAA Citizen Science Community of Practice</u>, which has grown to include over 200 members since its launch in November of 2013.

At the interagency level, NOAA is an active founding member of the Federal Community of Practice on Crowdsourcing and Citizen Science. Through two seats on the Steering Committee, NOAA has been able to guide the rapid growth of this community. NOAA contributes significantly to CitizenScience.gov, a government-wide hub for information on the field. There are over 50 NOAA projects in the site's catalog and three (3) case studies on NOAA projects in its Toolkit. The Implementation of Federal Prize and Citizen Science Authority: Fiscal Years 2017-18 report from the White House Office of Office of Science and Technology Policy (OSTP) to Congress detailed 86 projects from 14 government agencies, 11 of which came from NOAA. In addition, NOAA's Science Advisory Board reviewed the agency's use of citizen science and issued a report and recommendations for improving the use of citizen science to support data needs for ecosystem-based science. NOAA is using these recommendations to guide next steps for citizen science at the agency.

In 2020 NOAA identified citizen science as a new science and technology focus area and embarked on creating an agency citizen science strategy and implementation plan. The first ever NOAA Citizen Science Workshop was held in April 2020 to help advance collaboration among agency staff. NOAA is committed to being a leader in advancing innovation through public participation

### Project: CrowdMag, Non-traditional Observing of Earth's Magnetic Field

The Global Positioning System (GPS) provides accurate point locations, but it does not provide pointing directions. Therefore, the absolute directional information provided by the Earth's magnetic field is of primary importance for navigation and for the pointing of technical devices such as antennas, satellites, and smartphones. In all modern devices, pointing direction is determined by measuring the magnetic field with a vector magnetometer (compass) and comparing the measured vector with a reference magnetic field model. The precision of the resulting

directional information crucially depends on the accuracy of the reference model. NOAA's National Centers for Environmental Information (NCEI) develops magnetic reference field models to aid navigation and scientific research. The US Department of Defense, Federal Aviation Administration, NOAA's Coast and Geodetic Survey, US Geological Survey and the US Forest Service use NCEI's World Magnetic Model (WMM) for navigation and charting. NCEI works with technology companies such as Google and Apple to incorporate the magnetic reference models into consumer devices with miniaturized magnetic sensors. Currently, every iOS or Android device comes pre-installed with WMM, bringing WMM to more than one (1) billion devices around the world. NCEI use magnetic data collected by observatories, satellites and ship/airborne surveys to develop magnetic models. However, the available measurements leave gaps in coverage, particularly for short-wavelength (<20 km) anomalies associated with man-made infrastructure ("urban noise") and the magnetic minerals in rocks. ("crustal magnetic anomalies").

In partnership with the Cooperative Institute for Research in Environmental Sciences (CIRES), NCEI started a crowdsourcing project (CrowdMag) to collect vector magnetic data from digital magnetometers in smartphones. The aim is to test whether NOAA can obtain meaningful magnetic data from a large number of noisier measurements thereby filling some of the gaps in the global magnetic data coverage. A phone's magnetometer measures three (3) components of the local magnetic field with a typical sensitivity of about 150 to 600 nanotesla (nT). By combining data from vector magnetometers and accelerometers, the phone's orientation is determined. Using the phone's internet connection, magnetic data and location are sent to NCEI. NOAA checks the quality of the magnetic data from all users and makes the data available to the public as aggregate maps. Currently, the CrowdMag project has about 24,000 enthusiastic users who have contributed more than 31 million magnetic data points from around the world. A preliminary global magnetic model, solely based on CrowdMag data, has been developed and is generally consistent with the large-scale component of models such as the WMM. A unique contribution of the CrowdMag project is the collection of ground level magnetic data in densely populated regions. By binning the data in closely spaced grids, it is possible to create magnetic anomaly maps of urban regions. The "CrowdMag Day" campaign at the University of Colorado during 2017 summer offered an opportunity for several student interns to become scientists for a day. For CrowdMag Day, teams of fellow interns used the CrowdMag app to measure the Earth's magnetic field on a common traverse along Boulder bike paths. Analysis of magnetic data from multiple cell phones provided insights into the data stability of different types of phones. The teams also helped in the understanding of the amplitude and scale of urban infrastructure that can interfere with magnetic signals, specifically bridges, overpasses, underpasses, and intersections.

For more information, see: https://www.ngdc.noaa.gov/geomag/crowdmag.shtml.

#### Project: Crowdsourced Bathymetry

Bathymetry, defined as the depth and shape of the seafloor, underpins the safe, sustainable, cost effective execution of nearly every human activity at sea. Yet, most of the seafloor remains unmapped and unexplored with less than 18% of the oceans having been directly measured. The vast majority of the data used to compile global seafloor maps are estimated depths derived from satellite gravity measurements which can miss or provide only coarse-resolution depictions of significant features such as seamounts, ridges and canyons. Progress in mapping coastal waters is only marginally better with estimates indicating that 50% of waters shallower than 200 m having been surveyed.

Since 2014, the International Hydrographic Organization (IHO) has focused on encouraging innovative supplementary data gathering and data maximizing initiatives, such as the collection of crowdsourced bathymetry (CSB), to help address these data deficiencies. While CSB data may not meet accuracy requirements for charting, it does hold limitless potential for other uses. These data can be used to identify uncharted features, assist in verifying charted information, and help fill gaps where bathymetric data are scarce, such as unexplored areas of polar regions, around developing maritime nations, and the open ocean. CSB also has potential uses along shallow, complex coastlines that are difficult for traditional survey vessels to access but may be more frequently visited by recreational boaters. Most ships are inherently capable of measuring and digitally recording the depth in coastal waters and an increasing number of vessels are capable of taking measurements in deeper water, both using existing ship's equipment. The vision is to tap into the enthusiasm for mapping the ocean floor by enabling trusted mariners to easily contribute data to fill the gaps in our current bathymetric coverage.

NOAA chairs the IHO Crowdsourced Bathymetry Working Group and hosts the IHO Data Centre for Digital Bathymetry (IHO DCDB) at NOAA's National Centers for Environmental Information (NCEI). NCEI continues to enhance the DCDB infrastructure to provide archiving, discovery, and retrieval of global CSB and is now working to create a scalable point data store in a cloud environment. By storing and handling CSB as a seamless collection of points, NCEI could ultimately implement services to allow the generation of bathymetric grids, show data density that could guide future data collection efforts, provide statistics on bathymetric measurements, and allow the user to extract and download data from a given area in a user-specified format.

NOAA and the National Geospatial-Intelligence Agency (NGA) are active participants in the IHO CSB Working Group and along with other international scientific and hydrographic experts, recently finalized <u>IHO Publication B-12 – IHO Guidance on Crowdsourced Bathymetry</u>. This guidance document provides volunteer collectors with information about CSB, the installation and use of CSB data loggers, data quality issues, and instructions for submitting the data to the IHO data repository.

The working group is now focusing on developing strategies to encourage various maritime sectors (e.g.: cruise lines industry, regional fishing communities), either already equipped with appropriate technology or outfitted with inexpensive data loggers, to collect bathymetric data as part of their normal operations – in the same way that mariners currently and routinely observe the weather and make other marine environmental observations.

#### Project: Climate.gov Portal

What's New – In 2019, the Climate.gov team launched a three (3)-pronged initiative to modernize the site:

- 1. Redesign the interface based on user feedback to improve navigation, to make it mobile device-friendly, and to better aggregate content in accordance with users' interests;
- 2. Rebuild the site's back-end architecture to make it more secure, lightweight, and nimble; and,
- 3. To migrate the site to a more robust cloud-hosting platform within NOAA's Web Operations Center.

The redesign and migration are complete and the rebuild is almost done, with public rollout of the new site anticipated in July 2020. Meanwhile, publication of new content continues weekly or monthly in each section of the site, including:

Timely articles and data visualizations in 'News & Features', such as the popular "Visual Highlights of the 2019 Arctic Report Card;"

Monthly updated maps in our "Data Snapshots" gallery showing ongoing changes in climate conditions in the U.S. and globally; and,

Dozens of new, classroom-ready educational resources were published in our 'Teaching Climate' catalog.

In the U.S. Climate Resilience Toolkit (CRT), the team unveiled a new, redesigned version of the "Climate Explorer"—a web-based mapping and graphing tool offering downscaled projections for every county in the contiguous U.S. and the boroughs of Alaska. In 2020, NOAA will add Hawai'i and U.S. island territories. NOAA also added two new U.S. region-focused sections, including the Great Lakes and the Upper Midwest.

NOAA Climate.gov (<a href="https://www.climate.gov">https://www.climate.gov</a>) provides easy online access to authoritative science data and information for a climate-smart nation. Public demand for climate data and information has been growing steadily. Over its 10-year history (FY10-FY19), NOAA Climate.gov averaged 51% annual growth in visits (target was 10%). In 2019, the site received 7.8 million visits.

The site offers three (3) audience-focused sections:

News & Features — a popular-style online magazine for the climate-interested public, covering topics in climate research and science-based applications benefitting society;

Maps & Data — an easy-to-use gateway to help scientists and non-scientists to find and use climate maps and data for their own research and analysis purposes; and

Teaching Climate — a compendium of 662 classroom-ready learning activities and curriculum materials, multi-media resources, and professional development opportunities for formal and informal educators who want to incorporate climate science into their work.

Additionally, to help the nation's communities and businesses build resilience to climate-related impacts and extreme events, NOAA's Climate.gov team developed and launched the U.S. Climate Resilience Toolkit (<a href="https://toolkit.climate.gov">https://toolkit.climate.gov</a>). The Toolkit is an interagency partnership operating under the auspices of the U.S. Global Change Research Program. Its primary target audiences are decision makers (e.g., city planners, resource managers, policy leaders, facility managers) and decision services professionals (e.g., analysts and consultants) who oversee or help guide, develop and implement climate adaptation plans. Public demand for the Toolkit's contents has been growing rapidly. Over its 5-year history (FY15-FY19), the U.S. Climate Resilience Toolkit averaged 35% annual growth in visits (target was 10%).

The Climate Resilience Toolkit is a web-based framework that aggregates and contextualizes scientific information, tools, and expertise to help people:

Make and implement climate adaptation plans;

Explore how climate conditions are changing in their location and understand how their valued assets are, or may be, exposed to climate-related hazards; and,

Learn what other people are doing to address climate-related hazards similar to the ones they face and learn about funding sources that can help them recover from a disaster and/or mitigate future risks.

#### The Toolkit offers:

A 5-step adaptation planning process;

A library of over 140 real-world case studies showing people taking adaptation actions all across the nation;

A compendium of over 380 science-based decision-support tools;

A web-based mapping and graphing tool (Climate Explorer) that helps people visualize climate projections for their county in decision-relevant variables (e.g., temperature, precipitation, heating-/cooling-degree days, and high-tide flooding at 89 locations around the U.S.);

Ten different Topics sections with summary narratives excerpted from the 4th National Climate Assessment (NCA4) and other authoritative sources;

Five (5) Regions sections with summary narratives excerpted from the NCA3 and other authoritative sources;

A library of federal, state, local and tribal reports—including vulnerability assessments and adaptation action plans—from all across the nation;

A catalog of training courses;

Maps highlighting the locations of regional and local climate science and service centers that offer expertise and decision-support guidance; and,

A semantic search tool allowing users to search the entire federal government's climate science domain and filter results according to facets of interest.

#### Project: Digital Object Identifiers

NOAA's observations and forecasts are critical to the nation's commerce, decision-making, and research. When data are utilized for such purposes, it is important to be able clearly cite the data used, much as the author of an article or a book can cite sources. A key element of such citations is a unique identifier. A book can be referenced by its International Standard Book Number (ISBN), whereas an article or data can be referenced by a Digital Object Identifier (DOI). DOIs have been assigned to journal articles since the early 2000s and are increasingly being assigned to datasets. Once a dataset has been given a DOI, it is possible to use that identifier to navigate directly to an informational web page that describes the data and includes links to obtain the data and detailed documentation. The DOI remains the same even if the data are moved to another web site or organization, so this provides a permanent ID.

As part of its Open Government activities, NOAA continues to assign data DOIs to datasets archived in its National Centers for Environmental Information (NCEI). The NOAA Central Library issues DOIs for NOAA produced publications and reports archived in the NOAA Institutional Repository (NOAA IR). The NOAA Environmental Data Management Committee (EDMC) has issued a Data and Information Citation Procedural Directive with guidelines for citing datasets and publications with DOIs and requirements for obtaining a NOAA DOI. The fundamental requirement is that data are archived at NCEI and NOAA publications are archived in the NOAA IR.

The NOAA DOI project has several benefits:

It allows users to cite data and publications unambiguously;

It enables NOAA to track such citations in the scientific literature;

It encourages submission of data to the archives and publications to the NOAA IR;

It supports the linkage of publications and data called for in the White House Office of Science and Technology Policy (OSTP) memorandum <u>Increasing Access to the Results of Federally Funded Scientific Research</u>; and

It enables data producers and NOAA authors to get credit for data and publications they have properly documented and managed for long-term preservation.

NOAA will report at least quarterly the number of DOIs assigned to datasets and technical reports (the total number of NOAA DOIs is 9,900 as of March 31, 2020) and any future metrics or milestones in this initiative.

#### Project: Local Climatological Data (LCD)

In 2016, NCEI launched one (1) of its most popular datasets, providing updated and improved local climate summaries from several thousand locations. <u>Local Climatological Data</u> help users generate reports (known as LCDs) that summarize climate conditions for more than 2,500 weather stations and airports. LCDs are used widely across sectors from construction and transportation to courts and law offices.

The dynamically generated LCD product is available through the <u>Climate Data Online Data Tools</u> web page. The LCD contains more stations, including military and civilian networks, such as the U.S. Climate Reference Network (USCRN). Stations include those in the United States, U.S. territories, and global military sites totaling 2,551. Many users of LCDs require certification that indicates the record's authentication for particular uses, such as in a court of law.

The product includes hourly observations, associated remarks, and a record of hourly precipitation. The LCD also provides daily summaries of temperature extremes, degree days, precipitation amounts, and winds. Two new variables have been added: the number of days with thunderstorms and the number of days with heavy fog. Tabulations include:

Maximum, minimum, and average temperature;

Temperature departure from normal;

Dewpoint temperature;

Average station pressure;

Ceiling and visibility;

Weather type;

Wet bulb temperature;

Relative humidity;

Heating and cooling degree days;

Daily precipitation;

Average wind speed and fastest wind speed/direction;

Sky cover and occurrences of sunshine; and,

Snowfall and snow depth

All data in the LCD are drawn from several datasets archived by NCEI: Global Hourly Data; Global Historical Climate Network–Daily; Global Summary of the Month; and U.S. Normals for 1981–2010.

The online tool allows users to search by country, U.S. state, territory, county, and zip code. A "View Data" feature gives users a quick look at observations for a given day. Orders can be placed for customized time periods from multiple stations. The tool provides access to NCEI station history information and equipment details. Access to the bulk LCD data downloads is available in CSV format. The cloud ready format is much simpler and reflects the archived format. It is expected that the LCD product access points will transition to Common Access in 2020. Please reference the beta version <a href="here">here</a>.

The previously edited historical LCDs, as well as future annual editions, will continue to be available through the <u>Image and Publications System</u>. Monthly editions will no longer be published and will end after the December 2018 data month.

#### Project: Integrated Severe Weather Data via GIS Map Interface

This initiative provides an integrated map interface for the US, state and county-level storm damage information, lightning strike data, NEXRAD products (such as hail signature) along with other available severe weather data from NOAA's National Center for Environmental Information (NCEI). A user of the interface may, for example, select a date (a very recent date or for a major historical event) and view the data through one (1) interface. In 2020, the first version of an <u>updated map interface</u> was released.

Dataset Used: Next Generation Radar – or NEXRAD – Level-III point features describing general storm structure, hail, mesocyclone and tornado signatures, National Weather Service (NWS) local storm reports collected from storm spotters (storm events database), summarized lightning strikes from Vaisala's National Lightning Detection Network.

Future enhancement plans include integrating this interface with the Storm Events Database and the Billion Dollar Disaster summary dataset, thus expanding the sources of data available through the interface.

While the proposed integrated map interface is not yet available, the underlying data sources are available in easy-to-use formats from web services and bulk downloads. This enables users to

integrate the data in their own programs, such as ArcGIS, QGIS, Excel, and more. This also enables developers to integrate the data into their own analysis.

NEXRAD Level-III-point features describing general storm structure, hail, mesocyclone and tornado signature:

Web Services: https://www.ncdc.noaa.gov/swdiws/

Bulk Download: <a href="https://www.ncdc.noaa.gov/swdi/csv.html">https://www.ncdc.noaa.gov/swdi/csv.html</a>

#### Storm Events Database:

Web Access and Services: <a href="https://www.ncdc.noaa.gov/stormevents/">https://www.ncdc.noaa.gov/stormevents/</a>

Bulk Download: <a href="https://www.ncdc.noaa.gov/stormevents/ftp.jsp">https://www.ncdc.noaa.gov/stormevents/ftp.jsp</a>

#### Billion Dollar Disasters:

Web Access and Services: <a href="https://www.ncdc.noaa.gov/billions">https://www.ncdc.noaa.gov/billions</a>

#### Project: Data Visualization Capabilities for Global Summary Data

What's New – Summarized climate conditions are being displayed in a GIS map viewer for key geographic, commercial, and demographic regions. This application represents US interests which will be extended globally upon completion of the project.

As a dynamic mapping application for Global Summary Data from NOAA's National Center for Environmental Information (NCEI), <u>Global Daily Summaries</u> and <u>US Climate Indices</u> displays colorized maps for average, minimum, maximum temperature, and precipitation, snowfall and snow depth for all global locations, for any point in time. This application provides new capabilities via online services, to include implementation of the following example use cases:

An agricultural company can view information regarding a recent heavy rainfall event to assist in determining the area's most susceptible to nitrogen-leaching and would require supplemental fertilization for crops.

The USDA can view temperature data from a recent heat wave to determine regions which are likely to suffer from lower crop yields due to high temperatures.

In post-storm event analysis (such as a major hurricane), the data can be quickly viewed to correlate damage reports with climatological data.

Parameters such as temperature, precipitation, and snow depth have visualization capabilities via colorized maps, for all global locations, for any point in time. This includes over 30,000 currently active stations. For example, users are able to select a date (very recent date or for a major historical event) and view a color-plot of the data, such as minimum temperature. Additional station locations are being added to this dataset, to provide better spatial coverage.

US spatial constraints that can be applied include: states, counties, USDA HUCs (two (2), four (4), six (6), and eight (8)), river basins, USDA agriculture regions, climate divisions, climate regions, NCEI agricultural belts, NWA forecast offices, and zip codes.

Dataset Used: Global Historical Climate Network (GHCN)-Daily, comprising daily summary data (e.g., maximum/minimum temperature, precipitation, snowfall) for global locations.

#### Project: NOAA Wireless Emergency Alerts (WEA) and Common Alerting Protocol (CAP)

What's New – Major Improvements to Life-Saving Public Alerts

Wireless Emergency Alerts (WEA) are text-like emergency messages sent by alerting authorities through the Federal Emergency Management Agency's (FEMA) Integrated Public Alert and Warning System (IPAWS) to cell phones via commercial wireless carriers. WEA is an opt-out service and there is no charge to consumers. NOAA's NWS activates WEA for Tsunami, Tornado, Flash Flood, Hurricane/Typhoon, Storm Surge, Extreme Wind, Snow Squall, and Dust Storms Warnings. NWS activation of WEA has been credited with saving numerous lives.

WEA is a partnership between public safety officials, FEMA, Federal Communications Commission (FCC), the Department of Homeland Security (DHS), and NOAA's National Weather Service (NWS). Each WEA message is geographically targeted to cell phones using cell broadcast technology. Cell broadcast uses radio technology to deliver the alert to cell phones via cell towers which are inside and/or adjacent to the threat area as defined by the alerting authority. The use of radio broadcast technology means WEA is not subject to network congestion as with traditional point to point SMS text messaging.

In December 2019, wireless carriers began rolling out a major geographical targeting enhancement that is capable of delivering WEA messages to cell phones inside the warning polygon with no more than 0.1 of a mile overshoot. This enhancement is a result of significant collaboration among the WEA partners. Wireless industry is increasingly making cell phones available on the market which are compatible with the geotargeting enhancement.

In December 2019, WEA was also upgraded to allow for up to 360 characters in the WEA message, or four (4) times the previously allowed maximum of 90 characters. The upgrade also includes support for Spanish language alerts if provided by alert originators. NWS is taking advantage of the new capability by implementing WEA messages up to 360 characters and Spanish language WEA around Fall 2020.

See https://www.weather.gov/wrn/wea for more information about NWS activation of WEA.

The NWS system which enables NWS activation of WEA is HazCollect Extended. HazCollect Extended ingests NWS' traditional teletype style alerts, parses them into their most atomic parts, reproduces each alert in Common Alerting Protocol (CAP) format, and transmits each CAP

message to FEMA IPAWS. CAP is based on Extensible Markup Language (XML) and is an industry standard for the exchange of emergency alert information. FEMA IPAWS is this nation's all-hazard alert aggregator and serves as a gateway to wireless carriers for WEA as well as broadcasters for the Emergency Alert System (EAS), and a variety of other dissemination channels. NWS CAP messages which warrant WEA activation are specifically marked so that IPAWS only passes those alerts to wireless carriers.

However, FEMA IPAWS and WEA are just a couple of the many NWS CAP users. NWS CAP messages are also made available over NWS dissemination channels for consumption by numerous other commercial and non-commercial entities who redistribute these alerts to the general public. See <a href="http://alerts.weather.gov">http://alerts.weather.gov</a> for more information about NWS produced CAP.



# **National Telecommunications and Information Administration** (NTIA)

NTIA is the Executive Branch agency that is principally responsible for advising the President on telecommunications and information policy issues. NTIA's programs and policymaking focus largely on expanding broadband Internet access and adoption in America, expanding the use of spectrum by all users, and ensuring that the Internet remains an engine for continued innovation and economic growth.

NTIA has a range of activities to facilitate the public's access to information which can be found on the website under <u>Data Central</u>. Examples include:

Transparency into BroadbandUSA, a program to enhance connectivity and promote inclusion, and Broadband availability via an interactive tool.

Internet use data from the Census Current Population Survey via an interactive tool. Compendium of federal spectrum uses via detailed reports to support the nation's interest in and demand for expanded use of radio spectrum.

In addition, NTIA held two industry listening sessions where stakeholders were asked to identify incentives and policy options to ensure that the United States has adequate sources of secure, effective, and reliable 5G and future generation wireless communications systems and infrastructure.

NTIA's programs lay the groundwork for sustainable economic growth, improved education, public safety, health care, and the advancement of other national priorities.

# **Open Data**

NTIA publishes datasets and APIs at <u>data.gov</u> and on its websites. The Data Central section of NTIA's website, <u>www.ntia.gov/category/data-central</u>, is home to data and analysis on computer and Internet use in the United States. Data on Federal frequency assignments in the 225 to 6000 MHz bands by agency, band, and radio service are posted at <u>spectrum.gov</u> and <a href="https://www.ntia.gov/other-publication/2017/federal-government-spectrum-compendium">https://www.ntia.gov/other-publication/2017/federal-government-spectrum-compendium</a>.

#### **Proactive Disclosures**

NTIA publishes on its websites extensive information throughout its grants-making processes, including grant applications, awards documents, and quarterly and annual reports. This supports both the transparency goal as well as providing the public with information that otherwise would have to be obtained through Freedom of Information Act (FOIA) requests.

## **Privacy**

The NTIA Office of the Chief Financial Officer (OCIO) prepares compliance reports such as those required under the Federal Information Security Management Act (FISMA). NTIA follows departmental guidance on privacy from the Office of Privacy and Open Government (OPOG). The Office of Policy Coordination and Management (OPCM) requires IT security awareness training that covers Personally Identifiable Information (PII) to new employees during in-processing, as well as annual computer-based training. A list of available Privacy Impact Assessments is posted at <a href="https://www.ntia.gov/page/ntia-privacy-impact-assessments">https://www.ntia.gov/page/ntia-privacy-impact-assessments</a>.

#### Whistleblower Protection

NTIA follows departmental guidance from the Office of Inspector General (OIG). NTIA Associate Administrators send reminders to employees that any instance of waste, fraud and/or abuse should be reported to their supervisor, the office head, other Department officials or the OIG, without fear of retaliation. NTIA employees also receive periodic No Fear Act training.

#### Websites

NTIA uses websites as an effective tool to disseminate information about its programs and activities. The bureau's main website is <a href="www.ntia.gov">www.ntia.gov</a>; information on a range of new broadband and digital equity grant programs focused on promoting broadband access and digital inclusion is posted at <a href="https://internetforall.gov/">https://internetforall.gov/</a>; information on the BroadbandUSA initiative is at <a href="www.broadbandusa.ntia.gov">www.broadbandusa.ntia.gov</a>; telecommunications research and engineering services and technical reports at NTIA's Institute for Telecommunication Sciences (ITS) are featured at <a href="www.its.bldrdoc.gov">www.its.bldrdoc.gov</a>; and the First Responder Network Authority (FirstNet), an independent authority within NTIA that is deploying a nationwide public safety wireless broadband network, provides extensive information at <a href="www.firstnet.gov">www.firstnet.gov</a>.

#### Access to Scientific Data and Publications

NTIA's Institute for Telecommunication Sciences (ITS) performs cutting-edge telecommunications research and engineering with both federal government and private sector partners. As NTIA's research and engineering laboratory, ITS supports the bureau by performing the research and engineering that enables the U.S. Government, national and international

standards organizations, and many aspects of private industry to manage the radio spectrum and ensure that innovative, new technologies are used effectively. ITS has maintained physical archives of its technical reports going back to the 1960s and has been actively engaged in making them available electronically for over a decade.

Increasingly, technology transfer occurs through the publication of software rather than traditional technical reports, and NTIA makes an increasing number of software and data tools available via open-source download. ITS published the first computerized method for radio wave propagation prediction in 1968 and connected its main laboratory and the Table Mountain Field Site and Radio Quiet Zone to the ARPAnet (the predecessor of the Internet) in 1972. ITS software implementations of propagation models and technical data were disseminated via Internet in the early 1990s on one of the first federal web sites: <a href="its.ntia.gov">its.ntia.gov</a>, through which ITS continues to transfer research results to the public. NTIA/ITS has increasingly turned to GitHub to disseminate ITS-developed software, and as of FY 2022 has 27 public repositories. While the GitHub open-source platform allows more engagement with potential users of the software, the open-source paradigm also makes it more difficult to understand the impact of the software. In collaboration with other federal laboratories, ITS continues to explore the development of meaningful impact metrics for GitHub-posted code.

In FY 2017, ITS made public the first important software implementation of a propagation model to be released via the GitHub platform. The C++ implementation of the Extended Hata (eHata) Urban Propagation Model was used to inform regulation, and the repository was forked by the Wireless Innovation Forum (WInnForum), which redistributed it to industry members for use in developing the Spectrum Access Systems (SAS) that will enable spectrum sharing in the 3.5 GHz (CBRS) band using a novel three-tier architecture that includes database-driven opportunistic sharing.

In FY 2022, ITS launched the 5G Challenge in collaboration with the Department of Defense (DoD) to accelerate the adoption of open interfaces, interoperable components, and multi-vendor solutions in this critical sector. This competition will award up to \$3,000,000 to contestants who submit 5G hardware and/or software solutions.

# **Transparency**

NTIA publishes on its websites extensive information on its grants-making processes, including grant applications, awards documents, and quarterly and annual reports. The FirstNet Board of Directors webcasts its quarterly meetings, as well as committee meetings. Meetings of the Commerce Spectrum Management Advisory Committee are also webcast.

#### **Public Notice**

NTIA uses its public websites for sharing information and providing opportunities for participation and collaboration with the public. *Federal Register* notices of public meetings and requests for comment are posted on <a href="www.ntia.gov">www.ntia.gov</a> and <a href="www.firstnet.gov">www.firstnet.gov</a>. Numerous listservs provide announcements of events and activities. NTIA provides links to its Twitter, Facebook, YouTube, and LinkedIn accounts, as well as RSS feeds, to publicize its publications and activities. All comments in public comment proceedings are also posted.

As a recent example, in FY 2022 NTIA issued a Request for Comment (RFC) on a wide range of policy and program considerations associated with new broadband grant programs authorized and funded by the Infrastructure Investment and Jobs Act, also known as the Bipartisan Infrastructure Law. NTIA welcomed input from all interested parties, conducted extensive stakeholder outreach, and received 557 comments reflecting a diverse range of backgrounds and stakeholder groups.

Also, in FY 2022 NTIA hosted three listening sessions concerning Personal Data, Privacy, Equity, and Civil Rights. NTIA will solicit written comments on the topics discussed in these sessions. The data gathered through this process will be used to inform and report on the ways in which commercial data flows of personal information can lead to disparate impact and outcomes for marginalized or disadvantaged communities.

## **Records Management**

NTIA continues the process of moving from paper to electronic records management in accordance with guidance from the National Archives and Records Administration (NARA).

# Freedom of Information Act (FOIA) Requests

FOIA requests to NTIA must be in writing and can be submitted by mail, e-mail, fax, or via the Federal shared service <u>FOIAOnline</u> system. NTIA uses FOIAOnline for tracking and release of information to the public. A webpage of instructions on filing a FOIA request as well as contact information is at <u>www.ntia.gov/page/2011/foia-information</u>.

# **Congressional Requests**

NTIA receives congressional inquiries by phone, letter, and email. The Office of Congressional Affairs in the Office of the Assistant Secretary works with the Department's Office of Legislative and Intergovernmental Affairs to respond to inquiries promptly.

#### **Declassification**

The NTIA has no original classification authority.

## **Participation and Collaboration**

NTIA uses its public websites for sharing information and providing opportunities for participation and collaboration with the public. *Federal Register* notices of public meetings are posted on <a href="https://www.ntia.gov">www.ntia.gov</a> and <a href="https://www.firstnet.gov">www.firstnet.gov</a>. All comments in public comment proceedings are posted. Many public meetings are webcast and opportunities to participate by video conference are provided as well. NTIA provides links to Twitter, Facebook, YouTube, and LinkedIn accounts, as well as RSS feeds, to publicize opportunities for participation and collaboration.

NTIA's ITS hosts the annual International Symposium on Advanced Radio Technologies (ISART) that brings together government, academia, and industry leaders for the purpose of collaborating on groundbreaking developments and applications of advanced radio technologies.

## **NTIA Open Government Initiatives**

The table below shows a list of initiatives for NTIA.

Table 12 - NTIA Initiatives

Operating Unit	Project	Status	Estimated Completion
	Establishing Online Access to Results of Broadband Survey	Live / Operational	
	Publishing Federal Spectrum Transition Plans	Live / Operational	
	Creating a Federal Spectrum Compendium	Live / Operational	
	Multistakeholder Policy Process	Ongoing	
	BroadbandUSA	Ongoing	
	Internet for All Grant Programs	Ongoing	

#### Project - BroadbandUSA

NTIA launched the BroadbandUSA website -- broadbandusa.ntia.gov -- to inform the public about NTIA's work to expand broadband connectivity through educating, convening and assisting stakeholders. The website serves as a one-stop shop for broadband information around the federal government and makes it much easier for users to find grants information, events, webinars and publications they need.

The online portal supplements ongoing BroadbandUSA work to help local and state governments, industry and nonprofits obtain the tools they need to expand broadband connectivity and promote digital inclusion. For example, NTIA's National Broadband Availability Map (NBAM) is a geographic information system platform which allows for the visualization and analysis of federal, state, and commercially available data sets. This includes data from the Federal Communications Commission, U.S. Census Bureau, Universal Service Administrative Company, USDA, Ookla, Measurement Lab, BroadbandNow, White Star, and the state governments. The mapping platform provides users, including administrators from the 40 participating states and territories, with access to the NBAM and its data to better inform broadband projects and funding decisions in their states.

#### Project – Establishing Online Access to Results of Broadband Survey

NTIA has periodically sponsored data collections on Internet use and the devices Americans use to go online as a supplement to the Census Bureau's annual Current Population Survey. The most recent surveys were conducted in October 2009, October 2010, July 2011, October 2012, July 2015, November 2017, and November 2019. Another survey has been underway since November 2021. For this survey, NTIA, for the first time ever, asked researchers, advocates, and other interested members of the public to tell us how to improve the NTIA Internet Use Survey, and requested comments on the draft questionnaire. Through this effort, NTIA is examining why people do not use high-speed Internet service and is exploring differences in Internet adoption and usage patterns around the country and across socio-economic groups. NTIA and the Census Bureau release these data in open, Web-based formats, making the survey instruments and associated reports as widely available as possible. The Data Central section of NTIA's website, <a href="https://www.ntia.gov/category/data-central">www.ntia.gov/category/data-central</a>, is home to this data. The Data Explorer tool enables users to select from dozens of metrics tracked over time, as well as a number of demographic characteristics, and charts the requested data in multiple formats. Data Central web pages are consistently among the most visited on the NTIA website.

#### Project – Publishing Federal Spectrum Transition Plans

In March 2014, the Federal Communications Commission (FCC) adopted rules governing use of spectrum in the 1695-1710 MHz, 1755-1780 MHz, and 2155-2180 MHz bands for Advanced Wireless Services (AWS-3). The FCC, in collaboration with NTIA and the federal agencies, reallocated from federal use to non-federal use the 1695-1710 MHz and 1755-1780 MHz bands. Most of the incumbent federal systems currently using the 1755-1780 MHz band will relocate out of the band, although the FCC's rules also provide for indefinite sharing with a limited number of federal systems. Federal entities have submitted transition plans to NTIA, and NTIA has compiled and consolidated the estimated costs and timelines contained in the agency transition plans. In September 2014, NTIA published on its website the individual agency transition plans, and all plan data spreadsheets, in machine readable format. Updated plan data as well as aggregated Frequency/ Location/ Timeline data and aggregated Costs and Timeline data in XML and JSON formats were published in November 2019.

The FCC announced plans for a Citizens Broadband Radio Service (CBRS) spectrum auction in the 3550-3650 MHz band. The Commercial Spectrum Enhancement Act enables federal agencies to seek reimbursement for transition costs associated with an auction, and these plans must be made public no later than 120 days before the auction begins. NTIA provided initial estimates of sharing costs to the FCC in December 2019. These estimated costs were reviewed by OMB and approved by Congress. The final transition plans are posted on the NTIA website.

#### Project - Creating a Federal Spectrum Compendium

In April 2014, NTIA published a compendium of federal spectrum use in the 225 megahertz through 5 gigahertz bands—prime real estate that has prompted the most interest from both federal and commercial users. The compendium contains information for each frequency band in which the federal government has significant operations on an exclusive or shared basis. NTIA's compendium shows agencies' need spectrum for crucial tasks ranging from military flight testing to air traffic control to weather forecasting. The band reports provide a band-by-band description of how spectrum is used by federal agencies, the number and type of frequency assignments NTIA has authorized, and the percentage of frequency assignments by category. In addition, the data also feature contour maps showing where federal systems that utilize spectrum are located across the country. The compendium was made available initially in pdf format. NTIA first made the compendium data available in machine readable formats in FY 2015 and NTIA updates the information periodically. In FY 2017, NTIA expanded the compendium with ten new reports and data covering the 5 through 6 gigahertz bands.

#### Project – Multi-stakeholder Processes

In July 2012, NTIA began its first domestic multi-stakeholder privacy policy process, bringing together representatives from technology companies, trade groups, consumer groups, academic institutions and other organizations to develop a code of conduct on mobile application ("mobile app") transparency. A number of companies have adopted or are beginning to implement the code of conduct for mobile app transparency. A second multi-stakeholder process, begun in February 2014, focused on crafting privacy safeguards for the commercial use of facial recognition technology. A third multistakeholder process, begun in August 2015, focused on privacy, accountability, and transparency issues concerning Unmanned Aircraft Systems (UAS). NTIA began a multistakeholder process in September 2015 concerning the collaboration between security researchers and software and system developers and owners to address security vulnerability disclosure. In 2018, NTIA launched its multistakeholder process on Software Component Transparency, bringing together an active, engaged community to formulate and establish a software bill of materials (SBOM) – a nested inventory that makes up the "ingredients list" for software.

NTIA will continue to promote SBOM in our supply chain risk information work. With virtualized communications ecosystems expanding and improving our 5G footprint, transparency in software will be an important building block for security.

#### Project - Internet for All Grant Programs

Following the passage of the Infrastructure Investment and Jobs Act, NTIA is implementing the Broadband Equity, Access, and Deployment (BEAD) program, the Enabling Middle Mile Broadband Infrastructure Program, an additional Tribal Broadband Connectivity Program funding round, and three Digital Equity Act programs. NTIA is also administering the initial Tribal Broadband Connectivity Grant program, the Broadband Infrastructure Deployment Grant program, the Connecting Minority Communities Pilot Program, as well as implementing the provisions of the ACCESS Broadband Act.



# **National Technical Information Service (NTIS)**

Traditionally, The National Technical Information Service (NTIS) has served as the Federal Government Clearinghouse for scientific, technical information (STEI) and data produced by or for Federal agencies (15 U.S.C. § 1151 *et seq.* and 3704b) to the public and industry. NTIS still maintains the world's most comprehensive collection of U.S.-sponsored research. As part of "America's Data Agency," the U. S. Department of Commerce, NTIS helps federal agencies make better decisions about data, with data, to promote American innovation, scientific research, technology transfer and economic growth. Our 21<sup>st</sup> century mission focus is to provide the support and structure that helps federal agencies to securely store, analyze, sort, and aggregate data in new ways. NTIS along with our Joint Venture program (private-sector partners) works side-by-side with universities, nonprofits and industry professionals to create new ways to experiment with data science technologies that benefit the American public.

## **NTIS Open Government Initiatives**

The table below shows a list of initiatives for NTIS.

Table 13 - NTIS Initiatives

Operating Unit	Project	Status	Estimated / Actual Completion
NTIS	<ul> <li>National Technical Reports Library (NTRL)</li> <li>Online access to an electronic library of over 3 million bibliographic records (dating from 1964)</li> <li>Links to over 1 million corresponding full-text reports</li> <li>Coverage from the late 1890's to present (most reports date from the 1970's to present.)</li> <li>Launched Open NTRL on October 1, 2016. Open NTRL is freely available worldwide and includes the following advanced search capabilities:         <ul> <li>Search by title words</li> </ul> </li> </ul>	Addition of born digital documents received  Converting legacy content to digital format for inclusion	Ongoing
	<ul> <li>Search by source agency</li> <li>Search by author</li> <li>Search limited by year of publication</li> <li>Search limited to documents available in full text</li> <li>Search results providing access to all available full text reports in digital format.</li> </ul>		Ongoing

#### Project – National Technical Reports Library (NTRL)

The <u>National Technical Reports Library</u> (NTRL) provides access to the largest collection of U.S. Government-sponsored technical reports. There is metadata for more than 3 million records with links to approximately 1,000,000 digitized full-text reports. The NTRL provides an open environment for public access to the results of U.S. Government-sponsored basic and applied research.

The development of the NTRL is rooted within NTIS' basic authority to operate a permanent clearinghouse of scientific and technical information as codified in chapter 23 of Title 15 of the United States Code (15 U.S.C. §§ 1151-1157). This chapter also established NTIS' authority to provide products and services in a cost sustainable manner. Federal Agencies are required to

provide their research results to NTIS per the American Technology Preeminence Act of 1992 (Public Law 102-245) (ATPA), and the results are available to the public in perpetuity.

#### Project - Data Science Platforms

The U.S. Commerce Department's <u>National Technical Information Service</u> (NTIS) has established partnerships with *more than thirty-five (35)* organizations through a merit-based process as eligible to be joint venture partners (JVPs). The organizations, which include small and large companies, nonprofits and research groups, are eligible to compete to work with NTIS on groundbreaking data projects conducted for and funded by federal agencies.

The focus of the 21<sup>st</sup> century NTIS mission is to support the fostering of data science innovation. This new NTIS mission is about providing expertise and assistance to both Commerce and other Federal agencies in leveraging data as a strategic asset to deliver data-driven solutions to achieve mission outcome within the NTIS framework.

The federal government collects an enormous amount of useful data for evidence-based decision making about everything from weather and climate to statistics on the U.S. economy, population and demographics to trade statistics by market and industry, scientific advancements to innovation products and services, including jobs supported by exports. However, many barriers exist for efficiently using, sharing, analyzing, and gaining insights from these national data resources, either alone or in combination with non-federal data. NTIS wants to accelerate the data innovation process by quickly connecting private sector experts with agencies striving to create smart cities, deliver critical public services, enhance operational excellence, or improve accessibility and interoperability among national data sets.



## **United States Patent and Trademark Office (USPTO)**

The USPTO is the federal agency for granting U.S. patents and registering trademarks. In doing this, the USPTO fulfills the mandate of article I, section 8, clause 8, of the U.S. Constitution to "promote the progress of science and the useful arts by securing for limited times to inventors the exclusive right to their respective discoveries." The USPTO registers trademarks based on the Commerce Clause of the Constitution (article I, section 8, clause 3). Under this system of protection, American industry has flourished. New products have been invented, new uses for old ones have been discovered, and employment opportunities have been created for millions of Americans. The strength and vitality of the U.S. economy depends directly on effective mechanisms that protect new ideas and investments in innovation and creativity. The continued demand for patents and trademarks underscores the ingenuity of American inventors and entrepreneurs. The USPTO is therefore at the cutting edge of the nation's technological progress and achievement.

The USPTO advises the President, the Secretary of Commerce, and U.S. government agencies on IP policy, protection, and enforcement; and promotes stronger and more effective IP protection around the world. The USPTO furthers effective IP protection for U.S. innovators and entrepreneurs worldwide by working with other agencies to secure strong IP provisions in free trade and other international agreements. It also provides training, education, and capacity building programs designed to foster respect for IP and encourage the development of strong IP enforcement regimes by the United States' trading partners.

# **USPTO Open Government Initiatives**

The table below shows a list of initiatives undertaken by the USPTO.

Table 14 - USPTO Initiatives

Operating Unit	Project	Status	Estimated Completion
USPTO	Improving Transparency	Ongoing/ Continuous	
	Data Visualization Center	Live/ Operational	
	USPTO Open Source Code on Github	Live/ Operational	
	Open Data Program	Live/ Operational	
	FOIA and Congressional Requests	Live/ Operational	
	Improving Participation	Ongoing/ Continuous	
	Council for Inclusive Innovation	Live/ Operational	
	Website Improvements	Live/ Operational	
	Stakeholder Outreach Improvement Programs	Live/ Operational	
	Regional Offices	Live/ Operational	
	COVID-19 Response Resource Center	Live/ Operational	
	Inventor Resources and Training Programs	Live/ Operational	
	Independent Inventors Conferences	Live/ Operational	
	Improving Collaboration	Ongoing/ Continuous	
	Customer Partnership Meetings	Ongoing/ Continuous	
	Artificial Intelligence Task Force	Live/ Operational	
	Public Advisory Committees	Live/ Operational	

## **Project: Improving Transparency**

**Data Visualization Center**. The <u>Data Visualization Center</u> is a quick source of USPTO information regarding processing and quality measures in the Patents organization, the Trademarks organization, the Office of Policy and International Affairs, and the Patent and Trademark Trial and Appeal Boards. It is available from the USPTO homepage by selecting "Learning and

Resources" and subsequently choosing "Open data & mobility." Once there, users can see "dashboards" of specific data from each business unit, updated on a quarterly basis.

**Open Source Code on Github.** Consistent with the Federal Source Code Policy and in support of Open Government Initiatives, the USPTO continues to publish content on Github. This repository provides source code and artifacts for accessing public patent and trademark data.

**Open Data and Research Datasets.** Open data from the U.S. government is an important national resource, serving as fuel for innovation, scientific discovery, and commercial activity. It is central to a more efficient, transparent, and collaborative democracy.

The USPTO generates a vast amount of patent, trademark, and policy-related data each day. This data is a treasure trove of information about innovation used by independent inventors, businesses ranging from startups to large corporations, law firms, strategic patent analytics companies, academic institutions, government agencies, foreign IP offices, and the public at large. The USPTO's continued investment in enhancing its open data efforts is key to promoting equitable opportunities in innovation.

In FY 2021, the USPTO's Open Data Initiative, which provides publicly available data, enabled cutting-edge research in the artificial intelligence (AI) community. The "Pile Dataset" was released by EleutherAI, a consortium of AI researchers from top academic and industry labs. Scientists and engineers created this new database by using high-quality, curated material from numerous diverse and reputable sources, including the USPTO. The agency believes the Pile Dataset and the resulting models are a first step in realizing the long-term utility of patent data for AI research, and there are many other promising applications that are just beginning to be realized.

The USPTO continues its efforts to develop new datasets and Application Program Interface (API) services through its <u>Developer Hub</u> (known as the "Open Data Portal"), which enables IP researchers, businesses and other individuals to easily access IP data via bulk downloads, targeted searches and APIs. The USPTO also began a new effort supporting the information technology infrastructure of the <u>Patent Examination Data System</u> (PEDS) to keep pace with emerging business needs, security, and technology standards. This initiative involved the deployment of a new cloud-based repository of application metadata for nearly 10 million patent applications. PEDS contains the bibliographic, published document and patent term extension data tabs in Public PAIR from 1981 to the present. The USPTO is currently working on making these images and other data available to users through its APIs and other bulk download services in the near future

In the four years that Developer Hub has been in production, the volume and breadth of available of data has increased substantially, and the number of research reports and visualizations of IP data have also increased significantly. To continue to provide easy access to open data, the USPTO redesigned Developer Hub this year, creating a more intuitive interface and the USPTO's first Chatbot, both of which make the data search process easier.

To advance research on matters relevant to IP, entrepreneurism, and innovation, the Office of the Chief Economist (OCE) releases research datasets to support the study of the economics of patents and trademarks — an element in the USPTO's economics research agenda. OCE presents these data in forms that are convenient for both public use and academic research, consistent with the agency's responsibility to make patent and trademark information open and transparent. OCE has also developed supplementary documentation providing a comprehensive description of datasets and sharing initial findings. Furthermore, the USPTO's work on developing IP policy is supported by empirical studies, including those on the economic impacts of IP and innovation conducted by the OCE. In FY 2021, the OCE published two academic journal articles, including "Examination Incentives, Learning, and Patent Office Outcomes: The Use of Examiner's Amendments at the USPTO." The OCE also continued its efforts to improve the availability and quality of IP data, releasing six datasets covering a broad scope of IP-related information. All are available to the public on the USPTO's website.

Freedom of Information Act (FOIA) Requests. The USPTO has done an excellent job in responding to FOIA requests in a timely manner and processed 225 requests in FY 2021. The USPTO FOIA Office continues to monitor and examine the processing of FOIA requests received each year to determine how to further improve FOIA processing. The USPTO also continues to provide additional training to USPTO FOIA personnel, records custodians, and other agency employees.

addition maintaining dedicated Congressional Requests. In to mailbox a (congressional@uspto.gov), for constituent issues, the USPTO redesigned the Office of Governmental Affairs (OGA) webpage to make the format more useful. OGA has nine personnel, with one person dedicated to handling Congressional requests. When a request is received, staff consults with the appropriate subject matter expert. The Director of OGA reviews the Congressional query and the researched answer, and responds to Congress. The requests are not made public by the USPTO, as they often refer to specific patent applications that are privacyprotected by law for a specific period of time.

#### **Project: Improving Participation**

#### **New Initiatives**

Council for Inclusive Innovation. After a growing body of USPTO and academic research revealed limited participation by women and underrepresented minorities in the patent system, the USPTO established the Council for Inclusive Innovation. The Council consists of IP leaders in corporate, academic, professional, and government organizations, and is charged with helping the USPTO develop a comprehensive national strategy to increase participation in our innovation ecosystem by encouraging, empowering, and supporting all future innovators. The USPTO continues its ongoing work with the Council to draft and publish the national strategy, which will act as a reference for all organizations in the innovation economy to help them support diverse

inventors, entrepreneurs, and creators. In addition, the USPTO has identified, and will continue to identify with Council input, new agency initiatives that will provide participation in innovation and the development of IP.

**Website Improvements.** In parallel with its many other efforts to increase accessibility, the USPTO has been identifying various webpages it can improve to better meet the needs of its customers and the general public.

In FY 2022, the USPTO launched a new <u>Patent Public Search Tool</u> that enables more convenient, remote, and robust full-text searching of all U.S. patents and published patent applications. Based on the advanced Patents End-to-End search tool that USPTO examiners use to identify prior art, this free, cloud-based platform combines the capabilities of four existing search tools scheduled to be retired in September 2022. In conjunction with the launch of the Patent Public Search Tool, the USPTO unveiled a new <u>Patent Public Search webpage</u> that includes FAQs, training resources, and other information to help users transition to the new tool. Upcoming public training sessions will be posted on the webpage as soon as they are scheduled.

In FY 2021, the USPTO completely redesigned its main "front door" webpage for innovators and entrepreneurs. Linked prominently off the USPTO homepage, the **Inventor and Entrepreneur Resources webpage** is a one-stop shop for the public to learn more about IP and the processes required to secure and protect it.

A new <u>Inclusive Innovation webpage</u> has also been published to better serve stakeholders from diverse backgrounds, and orient them to services and training designed to meet them where they are.

The <u>Trademark Basics webpage</u> has also been redesigned to be more logical, user-friendly, and understandable by a lay person. A complementary Patents Basics webpage is currently under development, and the USPTO engaged in ongoing efforts to identify additional ways to streamline and improve its web content for all stakeholders.

**Stakeholder Outreach Improvement Programs.** In an effort to conduct better outreach to the public and its stakeholders, the USPTO has undertaken an analysis of potential outreach programs that could be created or improved for its customers. Many new programs are currently under development; existing programs include:

The Patent Trial and Appeal Board's (PTAB) Legal Experience and Advancement Program, which was established to help develop the next generation of patent practitioners by creating opportunities to gain oral argument experience before the PTAB. The expansion of the USPTO's pro bono services to include supporting pro bono work at both the PTAB and Trademark Trial and Appeal Board (TTAB). In March 2022, new services providing legal assistance to eligible inventors in PTAB ex parte appeals were established. The USPTO also plans to expand services to other PTAB appeal types. A similar program establishing services for qualified parties in TTAB proceedings was

launched in January 2022.

The creation of a new Stakeholder Application Readiness Training (StART) pilot program, where a selected group of aspiring inventors will be able to participate in a three-day intensive training program on the application process to empower them with the tools and knowledge to successfully file a patent application

The creation of the Tribal Nations Partnership, a year-long initiative to assist Native Americans, Alaska Natives, and Native Hawaiians who are interested in establishing or expanding their e-commerce presence, through monthly sessions focused on topics ranging from entrepreneurship to marketing and planning.

The expansion of IP education programs to regions of the country that have been underrepresented in the innovation economy through strategic collaborations with Historically Black Colleges and Universities, Hispanic Serving Institutions, Tribal Colleges and Universities, and community colleges to offer training and outreach programs that seek to broaden participation in the innovation ecosystem at all levels.

Collaboration with the National Crime Prevention Council to raise awareness about the dangers of counterfeit goods and merchandise. The joint <u>Go for Real campaign</u> reaches audiences across the United States and the world through social media, radio ads, and other strategic media. A recent example of the campaign's work is the <u>McGruff the Crime Dog® counterfeit goods ad series</u>.

#### Ongoing Initiatives

Regional Offices/Outreach. The USPTO operates a headquarters and Eastern Regional Outreach Office in Alexandria, Virginia and four additional regional offices across the nation. Combined, these provide inventors, entrepreneurs, and small businesses a USPTO presence in every U.S. time zone. Staff in the USPTO's offices work closely with IP practitioners, startups, and job-growth accelerators. They also collaborate with local science, technology, engineering and mathematics organizations on outreach and educational programing. Regional office programming pivoted to a 100% virtual model during the COVID-19 pandemic, which helped increase access for customers and stakeholders. As a result, during FY 2021, over 550 one-on-one meetings with customers and stakeholder were held.

**COVID-19 Response Resource Center.** The USPTO's <u>COVID-19 Resource Center</u> improves access to USPTO initiatives and programs, and other helpful IP-related information regarding the COVID-19 pandemic, including:

Fast-track appeal options for qualifying trademark and patent applications that are related to products, goods, and services that address the COVID-19 pandemic.

The <u>Patents 4 Partnerships</u> platform for the facilitation of licensing opportunities related to critical medical technologies. The USPTO has increased the number of entries on the platform through additional outreach to industry and U.S. federal laboratories. The USPTO is also considering expanding Patents 4 Partnerships or creating a new,

analogous platform to focus on green technologies.

**Inventor Resources and Training Programs**. The USPTO offers a wide variety of programs to ensure that novice and independent inventors and entrepreneurs have the necessary information to file for IP protection.

**Stakeholder Training on Examination Practice and Procedure (STEPP) for independent investors.** STEPP is a three-day, in-person course designed to provide external stakeholders with a better understanding of how and why an examiner makes decisions while examining a patent application. The training is led by patent examination subject matter experts, and the material used in the program is derived from training delivered to patent examiners and other USPTO employees. Participants learn how an examiner is taught to use the Manual of Patent Examining Procedure to make patentability determinations, and they gain an understanding of an examiner's point of view that may increase their situational awareness and aid in compact prosecution.

**Inventors Assistance Center (IAC).** Independent inventors can contact the USPTO's IAC for help on a variety of issues. Staffed by former, experienced supervisory patent examiners and primary examiners, the IAC provides patent information and services to the public, including assistance with filling out forms and general information on relevant rules, procedures, fees, and patent examining policy.

**Pro Se Assistance Program.** Recognizing that the cost of legal assistance for preparing and prosecuting a patent application is prohibitive for many independent inventors and small businesses, the USPTO launched the Pro Se Assistance Program, the first of its kind, to help inventors protect their valuable IP. The program is designed to assist everyone from students to veterans, and Ph.Ds. It helps make the U.S. patent system more transparent and reduces obstacles for unrepresented patent applicants. It also provides assistance to independent inventors and small businesses during the prosecution of their applications, provides targeted support to connect independent inventors and small businesses with relevant IP related resources and information and educates pro se applicants on the patent process and IP resources available.

Patent Pro Bono Program. This program is comprised of a nationwide network independently operated regional programs that provide under-resourced inventors and small businesses with opportunities to secure legal assistance for their patent needs. Each regional program provides services for residents of one or more states. Patent practitioners donate their time to help inventors who cannot afford to obtain legal advice on the filing and prosecution of patent applications. Inventors and small businesses that meet certain financial thresholds and other criteria may be eligible for free legal assistance in preparing and filing a patent application.

**Scam Prevention.** While the USPTO does not investigate complaints or participate in any legal proceedings against invention promoters/promotion firms, under the <u>American Inventors</u> <u>Protection Act of 1999</u>, the USPTO provides a public forum for the publication of complaints

concerning invention promoters/promotion firms. Also, in the forum, the USPTO publishes responses to the complaints from the invention promoters/promotion firms. The USPTO accepts complaints filed against invention promoters/promotion firms and forwards these complaints to the invention promoters/promotion firms for response. The USPTO does not accept complaints submitted under this system if the complainant requests confidentiality.

Patent and Trademark Resource Centers (PTRCs). Obtaining a patent for an invention without representation can be challenging for independent inventors and small business owners. Although the USPTO's website hosts a wealth of information about how to navigate the process, the amount of information and the automated tools available to search for prior art can be overwhelming for a novice.

Authorized by 35 U.S.C. § 12, PTRCs disseminate patent information and support the diverse IP needs of the public. PTRCs provide the human touch that is often very beneficial when helping inventors and small businesses navigate through the patent process and find information, they need to protect their IP.

Law School Clinic Certification Program. The Law School Clinic Certification Program allows law students enrolled in a participating law school's clinic program to practice IP law before the USPTO under the strict guidance of a law school faculty clinic supervisor. The program currently consists of students practicing in both patent and trademark law before the USPTO. It is administered by the USPTO's Office of Enrollment and Discipline. The Director of the Office of Enrollment and Discipline grants the law students limited recognition to practice before the USPTO.

Students gain experience drafting and filing either patent applications or trademark applications for clients of the law school clinic. Further, as they are authorized to practice before the USPTO, they gain experience answering office actions and communicating with either patent examiners or trademark examining attorneys for the applications they have filed.

#### **Inventors Digest**

The USPTO partners with <a href="www.InventorsDigest.com">www.InventorsDigest.com</a> to produce useful and timely information on USPTO programs and policies to support America's independent inventor and small business community. Issue features information inventors can use; tips on working with the USPTO; events, organizations and meetings of interest to the inventor community; issues that impact independent inventors and small business owners; and stories about people who have become successful inventors.

**Independent Inventors Conferences**. The USPTO hosts a number of annual conferences that provide a venue for IP and small business subject matter experts to deliver valuable information regarding IP and commercialization best practices that can help attendees be more successful.

For these events, the USPTO also invites representatives of federal and local organizations such as the U.S. Copyright Office, the Small Business Association, Minority Business Development Agency, as well as attorneys from IP Law Associations, and subject matter experts in marketing.

Additionally, independent inventors and small business owners are invited to share their personal experiences, success stories, and best practices for obtaining IP rights without representation.

Women's Entrepreneurship Symposium. The USPTO hosts the Women's Entrepreneurship Symposium to recognize the key role that women play in innovation and entrepreneurship. This event provides a platform for IP subject matter experts to share knowledge with women-owned businesses. It also offers a great opportunity for innovators and entrepreneurs, both men and women, to network and interact with officials from the USPTO.

**Invention-Con.** Innovators, small business owners, students, IP lawyers, educators, and entrepreneurs from across the country converge annually at Invention-Con. This three-day event gives participants the chance to learn from accomplished innovators, inventors, entrepreneurs, and business owners. It provides education on resources available throughout the innovation ecosystem as well as valuable information on developing an IP strategy.

#### **Project: Improving Collaboration**

The USPTO offers a number of opportunities for the public to participate in the agency's core mission. These programs allow the agency to gather ideas from and increase collaboration with those in the private sector, nonprofit, and academic communities.

Customer Partnership Meetings (CPMs). CPMs relay on the engagement of both internal and external stakeholders to establish enhanced communication channels. They provide valuable opportunities for external stakeholders to meet directly with USPTO representatives in a collaborative forum. CPMs allow the USPTO to share plans and operational efforts with stakeholders. These meetings also enable the patent community to exchange ideas, experiences, and insights and to discuss patent examination policies and procedures, mutual concerns, and solutions to common problems.

Artificial Intelligence Task Force. One of the agency's top priorities is to ensure that the United States maintains its leadership position in innovation, especially in emerging technologies (ET) such as AI. The USPTO has been actively engaging with the innovation community and experts in AI to determine whether further guidance is needed to promote the predictability and reliability of IP rights related to AI technology and to encourage further innovation in and around this critical area. To build on its efforts to encourage innovation, creativity, and entrepreneurship in AI and other emerging technologies (ET) and promote predictable and reliable IP rights for these technologies, the USPTO announced the formation of the AI/ET Partnership in June 2022. The USPTO aims to bring together all organizations and individuals from the AI/ET community,

including, for example, academia, independent inventors, small businesses, industry, other government agencies, nonprofits, and civil society through a series of engagements to share ideas, feedback, experiences, and insights on the intersection of IP and AI/ET. More information on these efforts can be found at https://www.uspto.gov/initiatives/artificial-intelligence.

#### **Public Advisory Committees (PACs)**

The PACs for the USPTO were created by statute in the <u>American Inventors Protection Act of 1999</u> to advise the Under Secretary of Commerce for Intellectual Property and Director of the USPTO on the management of patent and trademark operations. The PACs consist United States citizens chosen to represent the interests of the diverse customers of the USPTO. The PACs review the policies, goals, performance, budgets, and user fees of the patent and trademark operations and advise the Director on these matters. Appointments to the PACs are made by the Secretary of Commerce.