FOREWORD

September 2018

We are excited to share the Department of Commerce’s (Department) eighth publication of the Open Government Plan (Plan) with the public.

The release of this 2016-2018 Plan, version 5.0, represents our continued commitment to greater openness, transparency and accountability, strengthening democracy through driving innovation and economic opportunities, as well as meaningful civic engagement and public participation.

This fifth version of the Plan highlights how we have put our commitment to Open Government into practice. It includes innovative, forward-looking approaches to information access and dissemination, and the adoption of new tools and technology that help enable the principles of Open Government—transparency, participation, and collaboration.

We continue 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 are achieved with a mindset of openness that is shared by our twelve (12) different 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 website and encourage you to share your thoughts or suggestions by submitting comments to open@doc.gov.

Sincerely,

Dr. Catrina D. Purvis
Chief Privacy Officer, and
Director, Office of Privacy and
Open Government
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Introduction

Open Government is important to the Department’s mission to create the conditions for economic growth and opportunity by ensuring fair and reciprocal trade, providing the data necessary to support commerce and constitutional democracy, and fostering innovation of new technologies, products, processes, and services. Through its twelve (12) different 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, 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 of its Plan at www.Commerce.gov/open. Open Government Plan 5.0 provides an overview of the Department’s 2018-2022 Strategic Plan 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 (http://www.youtube.com/user/CommerceNews)

Twitter (https://twitter.com/CommerceGov)

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

What’s New

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

- The Bureau of Economic Analysis (BEA) is carrying out a comprehensive reexamination of the structure, content, usability, and design of its website. The modernized website will provide a more intuitive user experience and information
architecture centered on BEA’s data products. The redesigned site will be launched later in 2018.

• In 2018, the Census Bureau (Census) established its first Open Government webpage. Additionally, Census is changing the paradigm on how it disseminates data by looking at it from the users’ perspective. Data.census.gov is a preview environment for the Census to prototype data dissemination capabilities and receive customer feedback on improvements. It was developed as part of their commitment to streamlining the customer experience of finding, analyzing, and using Census data. Census is moving away from delivering data through many individual tools to a model where those tools’ capabilities are integrated and served on a single platform, eventually accessible by a single search bar on Census.gov.

• The Economic Development Administration (EDA) launched a new webpage Performance Measurement and Program Evaluation webpage in February 2018 that makes information on how EDA evaluates the success of its programs and numerous research reports and tools publicly available. This information assists the public in understanding how EDA operates and provides best practices and data to maximize the impact of local economic development infrastructure and non-infrastructure investments.

• The National Institute of Standards and Technology (NIST) published an open page on the NIST website, with content that was initially prescribed by the Office of Science and Technology Policy (OSTP). The page currently contains documents related to NIST plans for providing public access to research results. Updates to the page will provide visitors with information on how to access the narrative publications, public data, and software.

• NOAA’s Big Data Project is exploring the feasibility of using public-private partnerships to publish NOAA’s vast open data resources and increase their use by incorporating them into high performance computing, analytic, and storage services provided by the private sector. By promoting wider dissemination and lowering the barriers to use, this project has the potential to create new economic and job opportunities without using additional tax dollars.

• The U.S. Patent and Trademark Office (USPTO) modernized the PAIR Bulk Data system. Now customers can retrieve and download multiple records of the filing status of U.S. patent applications or patents at no cost. Additionally, the USPTO Developer Page (beta), is a platform which makes data faster and easier to use. It also features the ability to comb USPTO data with other data, such as economic data, report data on filing rates, inventorship, assignee, and location of filing, into
additional visual user stories.

Additional information and updates on the above initiatives and much more, are available in the “Ongoing Initiatives at the BOU (Sub Agencies)” section of this Plan.

Background

On December 8, 2009, the Office of Management and Budget (OMB) issued Memorandum M-10-06, known as the Open Government Directive to facilitate 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, we published our first Open Government Plan, establishing our commitment to implement the principles of transparency, participation, and collaboration among Department employees, as well as with other government agencies and the public. Today, in 2018, we continue to uphold the principles through Departmental and agency projects and initiatives that align with our 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 12 bureaus and operating units.

- Office of the Secretary (OS)
- Office of the Inspector General (OIG)
- Bureau of Economic Analysis (BEA)
- Bureau of Industry and Security (BIS)
- Bureau of the Census (Census)
- 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 and operating units, through their distinct missions, contribute to the Department’s overall objective of promoting economic growth for the nation and providing
opportunities for all Americans. These bureaus and agencies 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.

Note: The Economics and Statistics Administration (ESA) did not submit a report for this reporting period. ESA now functions under the Census Bureau. The Economic Development Administration (EDA) has been proposed for elimination in the FY 2019 President’s Budget.

Helping the American Economy Grow - An Overview of the 2018-2022 Strategic Plan

Helping the American economy grow is the goal outlined in the Department’s 2018-2022 Strategic Plan. It provides a broad foundation for economic growth and opportunity by focusing on five (5) goals:

- Accelerate American Leadership
- Enhance Job Creation
- Strengthen U.S. Economic and National Security
- Fulfill Constitutional requirements and Support Economic Activity
- Deliver Customer-Centric Service Excellence

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 goals and priorities, identified above. The Strategic Plan emphasizes that the foundation to the Department’s goal areas 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 terabytes of 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 which enable economic growth. The Department’s data enable start-ups, moves markets, protects life and property, and powers both small and multibillion dollar companies. The BEA produces estimates of gross domestic product (GDP), a key indicator of the health of the economy. The 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 the trade, innovation, and environment goals, it is also a national asset with untapped potential. The Strategic Plan is available at Commerce Strategic Plan 2018-2022.

Program and Functional Area Updates

Open Data

With tens of thousands of datasets ranging from satellite imagery to material standards to demographic surveys, the Department has long been in the business of Open Data.

Launched in 2018, the goal of the Federal Data Strategy is to develop practices that enable the Federal government to leverage data as a strategic asset, which is one of the goals of the President’s Management Agenda (PMA). The Department supports the goal of the Federal Data Strategy. The Department, along with the Federal Chief Information Officer, the Chief Statistician of the United States, and executives from the U.S. Small Business Administration and the White House Office of Science and Technology Policy, was charged with developing a comprehensive Federal Data Strategy under the PMA Cross Agency Priority Goal of Leveraging Data as a Strategic Asset. Under this goal, the Department began to help develop specific principles, practices, and actions to deliver a comprehensive, forward-looking Federal Data Strategy to foster economic growth and innovation, make government more effective, and improve transparency and oversight.

Data is at the core of the Department’s mission. The Department collects a vast amount of data on the Nation’s economy, population, and environment. BOUs continue to identify high value data of interest to the public and make that data accessible and useful so that businesses and communities can use the data for decision-making and accountability, including policy-making, innovation, oversight, and learning. In accordance with the Office of Management and Budget (OMB) Memorandum M-10-06, the Executive Order 13642 on Open Data, and the overall principles outlined in the Digital Government Strategy, BOUs publish datasets and Application Programming Interfaces (API’s) to Data.gov, and on their own website.

In accordance with the Open Data Policy, M-13-13, the BOUs publish information in machine-readable formats while also safeguarding privacy and security. BOUs continue to ensure information stewardship through the use of open licenses and review of information for privacy, confidentiality, security, or other restrictions prior to release. M-13-13 applies to all new information collection, creation, and system development efforts as well as major modernization projects that update or re-design existing information systems. Here are a few links to some of our open data resources:
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 21st 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 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 to assist 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 Department’s cyber related (electronic) PII incident reports are submitted to the U.S. Computer Emergency Readiness Team (CERT) within one hour of discovery/detection, in addition to the Department's Chief Privacy Officer (CPO) and the Department's Enterprise Security Operations Center (ESOC). 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 hour of a confirmed breach. Additionally, the Department produces and submits FISMA Senior Agency Official for Privacy (SAOP) reports in accordance with OMB guidance.

Additionally, in 2017, the Department published its Privacy Program Plan, which describes how it provides the public with access to information regarding the Department’s privacy program.

**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 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 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 EO and statutory provisions are incorporated into the Department's agreements and are controlling. See:

- Executive Order No. 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) 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. All Departmental websites must comply with the policies listed on this site, but many had not been updated in years. In 2018, the WAC has undertaken 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.

The Department is currently in the process of redesigning its web presence, Commerce.gov, to better highlight the Department’s mission and 2018-2022 Strategic Plan. The new design takes advantage of the U.S. Web Design System to improve the customer experience for all users by exposing a reorganized site architecture through robust navigation menus, creating a new section to highlight how the public can interact with our Department on a wide range of issues, and fully complying with the updated Section 508 / WCAG 2.0 accessibility requirements. Each individual page within the new site will include a simple thumbs-up, thumbs-down feedback widget, making it quick and easy for users to give feedback on the usefulness of the content while allowing for more detailed questions comments to be sent directly to the comment owner. The Office of Digital Engagement plans to launch a public beta version of the new Commerce.gov by mid-2018 to gather quantitative analytics and qualitative feedback from citizens on the design.

Many components within the Office of the Secretary, including the Office of Human Resources Management and the Office of Civil Rights, maintain older websites on legacy CMS platforms that are not mobile friendly or fully accessible. Over the coming year, the Office of Digital Engagement will be migrating those sites onto the new Commerce.gov platform so that the public can find all relevant information about the Department within one easy-to-navigate website.

Several BOU websites have also been recently redesigned since 2016 along the principles of customer-first and mobile-friendliness, including BEA.gov, Export.gov, NIST.gov, Census.gov and NOAA.gov.

Transparency

The Department improves transparency by proactively participating in and posting its information publicly at Data.gov, IT Dashboard, Recovery.gov, and USAspending.gov initiatives. The Department fully participates in eRulemaking, and all of the BOUs at the Department of Commerce 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 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 website. 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 which 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.

Over the past year, OPA worked closely with Industry and Analysis staff to conduct public outreach efforts surrounding the Section 232 investigations on the effects of imports of steel and aluminum on U.S. national security. On the Department’s website, the public could keep up-to-date with developments through the commerce.gov/steel and commerce.gov/aluminum landing pages, which brought together all public notices, searchable documents, reports, press releases, and important links. The BIS website created public comments libraries for both investigations, which together received a total of 292 written submissions, and the two public comment periods were promoted widely through DOC and BIS social media accounts. The Secretary personally convened two public hearings for the investigations in May and June of 2017, which were livestreamed via DOC’s YouTube and Facebook channels and have earned 15,450 total video views across both platforms. Below are BOU public outreach links:

Bureau of the Census (Census)

Foreign Trade Outreach and Education

Census Advisory Committees

Economics and Statistics Administration (ESA)

Commerce Data Advisory Council (CDAC)
The Department prioritizes Records Management as a critical and visible. It recognizes that effective Records Management ensures valuable records are identified, protected and preserved; which is the backbone to ensuring trust in the government. By accessioning our Departmental records to the National Archives and Records Administration (NARA), we participate in helping NARA achieve their mission to protect the rights of all Americans to drive openness, cultivate public participation, and strengthen our nation's democracy through public access to high-value government records.

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

Records Management Resources

The BOUs run Records Management programs to ensure those who are closest to the mission and understand the mission’s unique needs drive record schedules with appropriate disposition authority. At an enterprise level, the Department provides policy and promotes collaboration, the sharing of tools and templates, and provides in-person and virtual collaboration space for issue resolution for the BOUs. The Department co-established and co-serves on the Core Team of the Federal Records Officer Network (FRON). The Department uses the FRON to leverage best practices, tools, and templates across the federal agencies, as well as a forum to address issues. The Department’s Chief Records Officer serves as a member of the Federal Records Management Council.

Freedom of Information Act (FOIA) Requests

Electronic FOIA tracking system continues to help improve the efficiency of the Department’s FOIA program. All BOUs, use FOIAonline.

Designed to provide a more streamlined and transparent system for requesting information, the 3.0 version of FOIAonline was released in 2018. 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.

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 successfulness 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 Departmental FOIA regulations are published in the Federal Register.

In 2017, the Department published the DOC FOIA Reference Guide. 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 will make it more likely that individuals will 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 Commerce FOIA webpage and/or Electronic Library (Formerly e-Reading Room).

Table 1 - FOIAonline Core Functionality

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<thead>
<tr>
<th>FOIAonline Core Functionality</th>
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<tbody>
<tr>
<td><strong>Accept Requests Online</strong></td>
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<tr>
<td>• Allow requester to pre-populate their information</td>
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<tr>
<td>• Provide status to requesters</td>
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<tr>
<td>• Create communications (i.e. letters via email) between agencies and requesters</td>
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<th><strong>Track Requests in a Case File</strong></th>
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<tr>
<td>• Process and track FOIA request</td>
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<tr>
<td>• Break down requests into multiple tasks</td>
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<tr>
<td>• Multi-track processing (Simple, Complex, Expedited)</td>
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<tr>
<td>• Track time spent on requests (the list shifts from starting with –ing words to not… breaking down, track, assign…)</td>
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<tr>
<td>• Assign case numbers</td>
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<tr>
<td>• Start and stop the clock according to rules</td>
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<tr>
<td>• Keep an online folder of all documents related to a request <em>(including notifications to requesters)</em></td>
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<th><strong>Manage Deadlines</strong></th>
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<tr>
<td>• Start/Stop the clock</td>
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<tr>
<td>• Generate backlog reports</td>
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<tr>
<td>• Monitor workload</td>
</tr>
<tr>
<td>• Notify FOIA professionals based on 10- and 20-day deadlines</td>
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<tr>
<td>• Close cases when fees are not paid <em>(according to business rules)</em></td>
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<th><strong>Calculate Fees</strong></th>
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<tr>
<td>• Track fees and fee waiver processing</td>
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<tr>
<td>• Generate invoices</td>
</tr>
<tr>
<td>• Deduct what is free of charge (i.e. first 100 pages)</td>
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<tr>
<td>• Manually adjust recorded time</td>
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<tr>
<td>• Distinguish between search and review time</td>
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<th><strong>Research and Upload Records</strong></th>
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<tr>
<td>• Store consultations, referrals, and letters</td>
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<td>• Send tasks to others with instructions about which records to search</td>
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<td>• Upload scanned documents</td>
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<th><strong>Publish Electronic Records</strong></th>
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<tr>
<td>• Review/sign the case file to approve redactions and fee calculations</td>
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<tr>
<td>• Issue Partial/incremental releases</td>
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<tr>
<td>• Send system-generated email notifications to requesters</td>
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</table>
**FOIAonline Core Functionality**

<table>
<thead>
<tr>
<th>Functionality</th>
<th>Features</th>
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<tbody>
<tr>
<td><strong>Accept Appeals Online</strong></td>
<td>• Track status and outcome of litigation and appeals</td>
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<td></td>
<td>• Issue supplemental release after appeal</td>
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<td></td>
<td>• Forward copies of processing to Appeals unit</td>
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<tr>
<td><strong>Prepare the Annual Report</strong></td>
<td>• Prepare the report in the required format with the required data structure</td>
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<td></td>
<td>• Use dashboards to display these metrics throughout the year, including trends</td>
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<tr>
<td><strong>Search and Retrieve</strong></td>
<td>• Searching (including metadata and full-text)</td>
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</table>

**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](https://www.foiaonline.com), an automated online tracking and records management system. Released documents are uploaded to FOIAonline, 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 Department’s Secretary 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 Department Organizational Order (DOO) 10-12 “Assistant Secretary for Legislative and Intergovernmental Affairs,” which prescribes the top level
organization, authority, functions and responsibilities of the Assistant Secretary for Legislative and Intergovernmental Affairs and, therefore, OLIA. The DOO can be accessed at the following website: http://www.osec.doc.gov/opog/dmp/doos/doo10_12.html.

In addition to the DOO, other OLIA responsibilities and procedures are laid out in Department Administrative Order (DAO) 218-2 “Congressional and Legislative Affairs,” which details policies and procedures for responding to Congressional and Intergovernmental inquiries and outlines other procedures for OLIA. 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:

- **DAO 202-334 “Details.”** This DAO has a section on the Department’s details to Congressional Committees. Office purview: Assistant Secretary for Administration;
- **DAO 203-1 “Appropriation Requests and Related Budget Matters.”** Office purview: Assistant Secretary for Administration. It details how Office of Budget (OB) interacts with Congress on issues related to appropriations. In practice, OLIA supports OB in their efforts;
- **DAO 218-3 “Reports to Congress Required by Law.”** Office purview: Office of the General Counsel. It 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 of the Secretarial Officers responsible for clearing Congressional reports; and
- **DAO 218-1 “Legislative Activities.”** Office purview: Office of the General Counsel, however, it details the duties and policies of the Department with respect to legislative activities.

**Declassification**

The Departments and BOUs, specifically those with Original Classification Authority (OCA) can declassify documents. The Director of the Office of Security (OSY) is one of the three 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 the document(s) have historical permanent value they are transferred to National Archives Records Administration (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. The 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 accurate information about BOU declassification actions when records are transferred to NARA. The NARA provides guidance to the Department’s Records Management Officer concerning the requirements for notification of declassification actions on transferred records, box labeling, and identifying 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 the 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 in accordance to their declassification date, or subject to Part 3 declassification, of EO 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 sector through a variety of ways and for 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 approximately 60 plus Federal Advisory Committees 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 (FAC). The Federal Advisory Committee Act 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, 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 sector access to the Department’s information, services, and increase the understanding of funding opportunities.

Open Innovation Methods

The Department is a leader in innovation. The 2018-2022 Strategic Plan identifies innovation as a key driver of economic advancement. Forward-looking, 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. USPTO is working to improve the protection of intellectual property so that creators can profit from their inventions. Recently, the Census Bureau’s Administrative Data
Research Facility received the 2018 Government Innovation Award. 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; and
- Promote effective sharing of spectrum for multiple uses.

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, our research budget falls below the $100 million threshold established by the Office of Science and Technology Policy.

Spending Information

The Department recognizes the importance of transparency in spending. The Department uses the OMB established [USAspending.gov](https://usaspending.gov) 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

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 we are 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

The Department has many outstanding high-profile Open Government flagship initiatives and projects described in this new Plan. As we continue to move forward in implementing the principles of Open Government, we highlight a few flagship and continuing initiatives that we are undertaking to make the Department more transparent, participatory, and collaborative.

Census: Center for Enterprise Dissemination Services and Consumer Innovation

The Center for Enterprise Dissemination Services and Consumer Information (CEDSCI) at Census was established to transform and improve the customer experience for finding, using, and sharing Census Bureau data. Drawing on feedback from a wide variety of data users, this new approach to data dissemination will create a seamless data experience and create a single platform for accessing all Census Bureau data.
**NOAA: Big Data Project**

The Big Data Project (BDP) is an innovative approach to publishing NOAA’s vast data resources to facilitate public use of key datasets, allowing users to do analyses of data and extract information without having to transfer and store the massive datasets themselves.

**USPTO: Improving Access to Patent Data**

USPTO is releasing their Office Action Research Dataset for Patents making over 4.4 million detailed patent determinations from the last several years readily available to the public. This marks the first time that comprehensive data on examiner-issued rejections will be made readily available to the research community.

**Ongoing Initiatives at the Bureaus and Operating Units (BOU) (Sub Agencies)**

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 meets the needs of an ever-evolving public. This portion of the Open Government Plan identifies the various initiatives within the BOUs.
Office of the Secretary (OS)

Background

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 a number of "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>
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<tr>
<th>Operating Unit</th>
<th>Project</th>
<th>Status</th>
<th>Estimated Completion</th>
</tr>
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<tbody>
<tr>
<td>Office of the Secretary</td>
<td>Creation of the Commerce Data Advisory Council (CDAC)</td>
<td>Live / Operational</td>
<td>– –</td>
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<td></td>
<td>FOIAonline Freedom of Information Act (FOIA) Request Management and Reporting</td>
<td>Live / Operational</td>
<td>– –</td>
</tr>
<tr>
<td></td>
<td>Office of Digital Engagement</td>
<td>Live / Operational</td>
<td>– –</td>
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**Project – Commerce Data Advisory Council (CDAC)**

*What’s new – CDAC helps guide the Department’s data revolution to foster innovation, help create jobs, and stimulate better decision-making throughout our economy and society and provide increase tool capabilities making it easier for customers to access government IA.*

The new CDAC includes 19 of the preeminent and brightest private and public sector thought leaders on data management and dissemination in the U.S.

**Project – FOIAonline Freedom of Information Act (FOIA) Request Management and Reporting**

*What’s new – Improved request capabilities that include standard request input, improved tracking and reporting.*

[FOIAonline](#) 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, FOIAonline 3.0 was deployed providing users with additional features and improved performance.

**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 new Commerce.gov in 2018 to gather quantitative analytics and qualitative feedback from citizens on the design.
Bureau of Economic Analysis (BEA)

Background

The Bureau of Economic Analysis 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 gross domestic product (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, inter-industry 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 www.bea.gov, along with detailed methodology papers that explain exactly how BEA computes the Nation’s key economic indicators. The Bureau makes its subject matter experts directly available to the public, with names, phone numbers, and e-mail addresses published online. Additionally, to ensure transparency, prior to implementing changes to presentations or methodologies, BEA announces and conducts outreach to stakeholders through webinars, in-person briefings, 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 accounts data in an objective and cost-effective manner. Open data is central to this mission.

The [BEA’s Support of Open Data](#) webpage provides access to BEA’s downloadable datasets, online tools, and a listing of all public 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 has long made datasets available for download either as static files or via various interactive web applications, such as the [Interactive Data Tables](#) that make it easier to access and explore BEA data. In 2017, BEA introduced the [BEA Industry Facts](#) data tool to allow data users to easily access and view BEA’s statistics on a particular industry all in one place.

In addition, BEA recently modernized its website to provide a more intuitive user experience and information architecture centered on the Bureau’s data products, in contrast to the previous framework that mirrored the Bureau’s organizational structure. BEA launched its new website in August 2018.

BEA also publishes a blog and utilizes social media to further support its efforts to promote data releases, highlight new data offerings, and provide insight into its data products.

**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 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.
Confidential Information Protection and Statistical Efficiency Act of 2002 (CIPSEA)

International Investment and Trade in Services Survey Act (Pub. L. 98-573)

The Policies and Information webpage includes links to sections detailing BEA’s Privacy Policy and the Legal Authority and Confidentiality of International Survey 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 DOC No FEAR Act Policy, which dictates BEA policy.

Websites

BEA maintains one domain, www.bea.gov. Through this website, BEA provides access to its data, information about the methodology used to produce the data, the data release calendar, a blog, as well as an open data portal.

The website complies with the Department’s Policies and Best Practices. BEA’s website provides a Digital Government Strategy link to make the public aware of these Commerce-wide policies. BEA has also incorporated the tracking code for Analytics.USA.gov 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

In 2017, BEA hired its first Chief Innovation Officer (CIO) to help develop cross-cutting strategies to better anticipate future customer needs. The CIO works closely with Bureau leadership on a vision to guide bureau-wide innovation and help develop new and enhanced statistical products.

The Bureau’s website features a page for Developers with various tools to assist programmers and researchers. Interactive tables let users quickly access, chart and download data. For programmers, the BEA data application programing interface (API) provides programmatic access to BEA published economic statistics using industry-standard methods and procedures. BEA’s data API
includes methods for retrieving a subset of BEA’s statistical data and descriptive metadata 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.

**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 https://github.com/us-bea/ ) 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.

BEA also posts the online tutorial Guide to Economic Data + Interactive Visualization in R to help data users access economic data through BEA’s R library and create interactive maps.

**Spending Information**

The Department of Commerce coordinates implementation of the Digital Accountability and Transparency Act of 2014 (DATA Act), including the reporting of spending information, at the department management level for smaller bureaus such as BEA.

**Transparency**

BEA participates in Data.gov, e-rulemaking, IT Dashboard, and USA Spending 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 works with the Department’s Office of Digital Engagement on ensuring effective two-way communication with the public about the Bureau’s initiatives.

**Release dates** for economic indicators produced by BEA are posted in advance on the agency’s website. Information on conferences and meetings is also posted on the website.

The [BEA Advisory Committee](#) advises the Director of BEA 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.

Further, with respect to changes in schedules, methodologies or other pertinent information, BEA follows the requirements of Office of Management and Budget (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 a records management specialist 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 (FOIA) 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 [Department’s FOIA page](#) provides instructions on submitting requests either electronically through the Department’s FOIA tracking and processing tool, [FOIAs offline](#), or in paper form. Requests are coordinated by BEA’s dedicated FOIA officer. All BEA FOIA requests are reviewed and responded to as fully and promptly as allowed and directed by law and the [Department’s FOIA regulations](#).
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 Information for Congressional Users, which directs users to a page with the quick-access resources for commonly requested information and data.

The Contact Us 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 embargos 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.

Participation

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

The BEA Advisory Committee 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.

BEA also receives guidance and advice from the Federal Economic Statistics Advisory Committee.

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 Open Government Initiatives**

The table below shows a list of initiatives for **BEA**.

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<td>Enhancing Communications through Web and Social Media</td>
<td>Ongoing / Continuous</td>
<td>_ _</td>
</tr>
<tr>
<td></td>
<td>New Data Products</td>
<td>Ongoing / Continuous</td>
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</tbody>
</table>

*KProject — 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.

After carrying out a comprehensive reexamination of the structure, content, usability, and design of its website, bea.gov, BEA used the information learned to redesign its website to better serve the public. The modernized website provides a more intuitive user experience and information architecture centered on the Bureau’s data products, in contrast to the previous framework that mirrored the Bureau’s organizational structure. The redesigned site was launched in August 2018.

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 is also creating innovative video content and improving its social media presence.

*KProject – BEA 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 household’s 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. We’re working on innovations that will lead to expanded data in several areas.

Statistics that are new or under development include:

*Arts and Cultural Production Satellite Account* – BEA released first-of-their kind statistics in March 2018 that show how much arts and culture contribute to the economies of all 50 states plus the District of Columbia. The arts and culture economy includes music, theater, design, museums, historical sites, nature parks, and more, as well as supporting industries such as broadcasting, filmmaking, and publishing. These new statistics add to other annual data on arts and culture, providing a rich, detailed picture of this part of the economy. BEA now produces detailed national and state figures and trends on the arts and culture sectors’ value added, employment, and compensation, as well as national figures for gross output.

*Outdoor Recreation Satellite Account* – New “prototype” statistics measuring the economic effects of outdoor recreation—pursuits like boating, RVing and snowboarding—across the U.S. economy were released by BEA for the first time in February 2018. BEA will continue to gather feedback from businesses, industry groups, and other interested members of the public to help finalize definitions, data sources, and methodology. A final set of detailed national statistics is expected to be released in the fall of 2018. These new annual statistics also include economic activities that support outdoor recreation, such as a family traveling to hike in a national park. Going forward, BEA may produce the national statistics on a regular basis and may explore the feasibility of also producing state-by-state statistics on the outdoor recreation economy.

*County Economies* – BEA is moving towards the creation of a new set of statistics that would measure the economic performance of the nation’s 3,000-plus counties. These prototype GDP by county statistics, expected to be released in the fall of 2018, would provide a total GDP figure for each county and, if feasible, some detail about how goods-producing industries, services-producing industries and government fared there. Going forward, BEA would consider the feasibility of providing more detailed information about industries in each of the counties. These annual statistics would help businesses identify local markets for their products, assist local governments seeking to attract investment, and give a fuller picture of the economic landscape across the United States.

*Digital Economy* – BEA in March 2018 released, for the first time, preliminary statistics and an accompanying report exploring the size and growth of the digital economy. That marked a crucial step in a larger data project aimed at developing tools to better capture the effects of fast-changing technologies on the U.S. economy and on global supply chains. The project seeks to calculate the digital economy’s contribution to U.S. GDP, improve measures of high-tech goods and services, and offer another way of looking at international trade. Other goals
are to advance research on digital goods and services, the sharing economy, and free digital content, and to explore economic measures beyond GDP to better understand Americans’ well-being.

*Household Production Satellite Account* – What’s the value of unpaid work done in the home? Things like cooking, cleaning, watching the kids, and so forth? BEA plans to produce statistics in late 2018 that measure “household production” that took place in 2016. Going forward, BEA will explore the feasibility of producing a set of household production statistics each year. Such unpaid work is not included in BEA’s calculation of GDP. This project is part of ongoing efforts at BEA to produce economic measures that go beyond GDP and that measure economic value outside the market economy.

*International Trade Statistics* – In 2016, BEA expanded its annual statistics on trade in services to cover over 90 countries and country groups (up from 38), giving a more detailed look at how U.S. businesses buy and sell services around the world. BEA is working toward expanding its quarterly statistics to show similar geographic detail. BEA is also working toward publishing more detail about some of the most dynamic sectors—including research and development, intellectual property, and medical services.

*Industry Statistics* – BEA is working toward expansion of its published statistics to cover nearly 140 industry categories (up from 71) to allow deeper analysis of industry trends. For example, computer and electronic products manufacturing will be subdivided into smaller industries, such as makers of semiconductors. The expanded industry detail will be published as part of BEA’s comprehensive update to the industry accounts in the fall of 2018.

*Health Care Satellite Account* – In June 2018, BEA for the first time released statistics that provide information on how much Americans spend to treat more than 200 specific medical conditions, such as acute myocardial infarctions, chronic kidney disease, and osteoarthritis, as well as 63 broader medical groupings, such as heart conditions and hypertension. Previously, spending was available for only 18 much more expansive categories. The new detailed statistics provide researchers and other data users a fresh tool to gain deeper insights into spending patterns to treat different medical conditions.
Bureau of Industry and Security (BIS)

BIS is committed to all three pillars of open government – transparency, participation, and collaboration - not only because it is the right thing to do, but also because doing so helps us fulfill our mission to advance U.S. national security, foreign policy, and economic objectives by ensuring an effective export control and treaty compliance system and by promoting continued U.S. strategic technology leadership. One way this Open Government Plan will help us meet our mission and also make sure we continue to be a model employer is by strengthening internal collaboration.

Primary BIS Activities

Maintain and strengthen an adaptable and effective U.S. export control and treaty compliance system. BIS also administers and enforces controls on exports of dual-use goods and technologies to counter proliferation of weapons of mass destruction (WMD), combats terrorism, and pursues other national security and foreign policy goals.

Integrate non-U.S. actors to create a more effective global export control and treaty compliance system. The effectiveness of U.S. export controls is enhanced by strong controls in other nations that export, or transship sensitive goods and technologies. BIS works to improve the participation and compliance of existing members of multilateral export control regimes and cooperates with other countries to help them establish effective export control programs. As part of export control policy formulation and implementation toward key trading partners and transshipment countries, BIS utilizes an end-use visit program.

Ensure continued U.S. technology leadership in industries that are essential to national security. BIS works to ensure that the U.S. remains competitive in industry sectors and sub-sectors critical to national security. To this end, BIS analyzes the impact of export controls and trade policies on strategic U.S. industries, administers the Federal Government’s Defense Priorities and Allocations System (DPAS), reports on the impact of defense trade offsets, and evaluates the security impact of certain proposed foreign investments in U.S. companies.

Open Data

https://www.bis.doc.gov/data-portal
BIS publishes datasets on its website. BIS Office of Technology Evaluation analyses U.S. export data subject to the Export Administration Regulations (EAR), BIS license application data and global trade information to assess data trends and inform export policy decisions. The offices compiles much of its analyses into statistical reports used often by BIS staff. This data portal provides excerpts from these statistical reports in one location, along with data sets that enable the public to perform analyses of exports and licensing on their own.

**Proactive Disclosures**

To achieve an informed citizenry BIS proactively takes affirmative steps in releasing information to the public without waiting for specific requests. Whenever possible, BIS releases information to the public through FOIA with frequently asked questions being posted via the Office of Congressional and Public Affairs (OCPA). The Bureau also publishes information on Regulations, Licensing, Enforcement, Compliance & Training, Policy Guidance, and Export Control Reform on its public webpage at [www.bis.doc.gov](http://www.bis.doc.gov). BIS publishes releasable information through the Department’s FOIAonline ([https://foiaonline.regulations.gov](https://foiaonline.regulations.gov)) and releases information via EFOIA ([http://efoia.bis.doc.gov/](http://efoia.bis.doc.gov/)) on BIS’ public website. Information such as Antiboycott Violations is posted for public viewing. BIS is committed creating transparency of information to the extent feasible and consistent with applicable laws, policies, agency missions, resources constraints, and U.S. National, economic securities. BIS utilizes FOIAonline to process all FOIA requests. If a requestor submits a request other than through FOIAonline, ITA uploads the request into FOIAonline 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, they are publicly disclosed electronically through the Department’s FOIA tracking and processing tool, FOIAonline.

**Privacy**

The Bureau is committed to the principles of transparency while also meeting its responsibility to privacy compliance. BIS considers Personally Identifiable Information (PII) and Business Identifiable Information (BII) to be of the highest priority. The Bureau complies with the following:

- The Privacy Act of 1974, 5 U.S.C. § 552a
- OMB Memorandum M-06-15, Safeguarding Personally Identifiable Information (May 22, 2006)
• OMB Memorandum M-06-16, “Protection of Sensitive Agency Information” (June 23, 2006)
• OMB Memorandum M-06-19, “Reporting Incidents Involving Personally Identifiable Information and Incorporating the Cost for Security in Agency Information Technology Investments” (July 12, 2006)
• OMB’s Memorandum entitled “Recommendations for Identity Theft Related Data Breach Notification” (September 20, 2006), OMB Memorandum M-07-16, “Safeguarding Against and Responding to the Breach of Personally Identifiable Information” (May 22, 2007)
• OMB Memorandum M-11-02, “Sharing Data While Protecting Privacy” (November 3, 2010)

Whistleblower Protection

BIS strictly adheres to all anti-discrimination and whistleblower requirements by ensuring all the employee complete the mandatory training every two years. BIS is fully compliant with the Department’s No FEAR Act Policy.

Websites

BIS actively pursues a policy of Open Government throughout the Bureau. BIS’ outreach activities and websites are great examples of how BIS embraces Open Government. Information is updated as it becomes available through the EFOIA website at http://efoia.bis.doc.gov/ which also includes press releases, speeches, testimonies and an index of other documents for public release. The Bureau’s main public website at http://www.bis.doc.gov/ post regular updates of information for the Export Administration and Export Enforcement communities and other items of interest to the public dealing with BIS.

Ongoing Initiatives

BIS holds regular seminars, as well as online training modules and webinars to assist individuals and companies with complying with the Export Administration Regulations.

One of the Bureau’s major outreach initiatives is the “Annual Update Conference on Export Controls and Policy”. This conference gives the exporting community the opportunity to learn first-hand from senior U.S. Government officials about current issues and trends in export control policies, regulations and practices. This event draws business and government representatives from around the world to learn and exchange ideas about export control issues. It provides the opportunity to network with colleagues in the export control industry, interact with U.S. Government officials, and learn about programs and services offered by U.S. Government and industry exhibitors. It is one of the Department’s most notable international trade events.
Other initiatives include instructional programs on “Complying with U.S. Export Controls”. This two-day program is led by BIS's professional counseling staff and provides an in-depth examination of the Export Administration Regulations (EAR). The program covers information exporters need to know in order to comply with U.S. export control requirements on commercial goods. This program of instruction focuses on what items and activities are subject to the EAR; steps to take to determine the export licensing requirements; how to determine an export control classification number (ECCN); when and if an exporter can export or reexports without applying for a license; export clearance procedures, record keeping requirements and Export Management Compliance Program (EMCP) concepts. Presenters typically conduct a number of "hands-on" exercises that will prepare practitioners to apply the regulations as it pertains to industry export activities. This one-of-a-kind program is well suited for those who need a comprehensive understanding of their obligations under the EAR.

BIS also offers export control conferences where senior U.S. Government officials discuss current issues and trends in export control policies, regulations and practices. These conferences are intended for the experienced export control practitioners.

Public Notice

BIS publishes on its website all upcoming seminars being held in an effort to keep industry informed of any and all upcoming changes and answer questions concerning the export control regulations. BIS ensures compliance with the Paperwork Reduction Act by posting public notices in the Federal Registry six months ahead of a renewal for required information.

Records Management

BIS continues to move from paper to electronic use and storage of documents. This is being done by electronic use and storage of current documents and destroying paper documents through attrition. Each entity throughout the bureau coordinates with the records manager to archive documents when necessary and destroy when the annual disposition date for these documents have come.

Freedom of Information Act (FOIA) Requests

BIS FOIA officer uses the Department’s FOIA tracking system for tracking and release of information to the public. The Bureau also has a FOIA webpage located at http://efoia.bis.doc.gov/ which includes EFOIA releases and how to file, and the process of filing a FOIA request. BIS has one FOIA officer and provides additional support when needed to alleviate any backlog from occurring. The FOIA officer receives requests through the Department’s FOIA tracking and processing tool; FOIAonline, through emails; faxes; or regular mail. All FOIAs are tracked in the FOIAonline system which informs the Department’s FOIA officer of the new FOIA requests and shows the tracking and progress of each request.
Congressional Requests

The legislative branch of our Federal government has intense interest in the work conducted by BIS. Like the public, members of Congress and their staff frequently direct letters, emails, facsimiles and phone calls that require timely and responsive reply. The Bureau’s Office of Congressional and Public Affairs works closely with the Office of the Under Secretary and Deputy Under Secretary to oversee all requests and responses to and from Congress.

Declassification

BIS declassifies information as soon as it is publicly releasable. Whenever possible, the Records Manager assist the office of responsibility in reviewing and releasing information which has reached its declassified date or is no longer required to be classified.

Transparency, Collaboration, & Collaboration

The Bureau actively communicates with Industry to share and collect information needed to accomplish both the Bureau and Departmental goals. In FY 2018, BIS has planned 18 domestic export control seminars in 16 cities. These seminars provided guidance to new and experienced exporters regarding the EAR, changes in export policy and licensing procedures, as well as encryption and technical data issues. In addition to the seminars and the “Annual Update Conference on Export Control Policy” as noted in earlier section, BIS also participated as a speaker or represented BIS within information booths at several dozen additional events hosted by other organizations. These seminars and conferences are BIS’ best practices for ensuring effective two-way communication with the public, ensuring openness and transparency.

BIS Open Government Initiatives

The table below shows a list of initiatives for BIS.

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Project – Website transformation

In response to the feedback from our many stakeholders and the bureau’s continuous effort to meet Open Government requirements, BIS has initiated a website redesigned project team to make the main website (www.bis.doc.gov) more user-friendly by incorporating the use of
Google Analytics and Agile technology methodology to improving navigation features, gather better metrics and establish more uniformity by instituting policies.

**Project – Seminars and Webinars for training**

BIS will continue to hold its regular seminars and training webinars for individuals and companies wanting to understand the Export Administration Act. These seminars are physically held in various locations in the country. These training sessions gives the exporting community the opportunity to learn first-hand from senior U.S. Government officials about current issues and trends in export control policies, regulations, processes and practices. Training information can be found at [https://www.bis.doc.gov/index.php/compliance-a-training/export-administration-regulations-training](https://www.bis.doc.gov/index.php/compliance-a-training/export-administration-regulations-training). BIS also update the seminar schedule as they are being planned. Detail information can be found at [https://www.bis.doc.gov/index.php/compliance-a-training/current-seminar-schedule](https://www.bis.doc.gov/index.php/compliance-a-training/current-seminar-schedule).
Bureau of the Census (Census)

As the federal government’s largest statistical agency, Census is dedicated to providing reliable, current statistical information about America’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 done at the Census is based on strong standards for openness to user and respondent concerns, independence and neutrality, robust statistical standards, and confidentiality. Through these standards, Census is inherently aligned with the open government principles of transparency, participation, and collaboration.

Open Data

Census data continues to be a key national resource, serving as a fuel for entrepreneurship and innovation, scientific discovery, and commercial activity. Census participates in data.gov and eRulemaking initiatives. We continue to publish current datasets to data.gov as identified on a flow basis. At the end of the second quarter of FY18, Census had posted 245 datasets. Additionally, we publish documents that describe input data, methodology, and process for the creation of population and housing unit estimates for various geographies. Design and Methodology Reports that describe the basic design of the American Community Survey and details of the full set of methods and procedures are publicly available.

We continuously identify and publish datasets and Application Programming Interfaces (API) to data.gov in accordance with the Office of Management and Budget (OMB) Memorandum M-10-06, the Executive Order 13642 on open data, and the overall principles outlined in the Digital Government Strategy. We regularly update and add information about datasets available for the API through the Developer’s Forum.

Our Open Data efforts are an extension of our work in open government and the digital government strategy, and support our efforts to engage with citizen developers to deliver better services to the American people. Our data dissemination objectives remain aligned with the principles of open data and the digital government strategy. As our Center for Enterprise Dissemination Services and Consumer Information (CEDSCI) evolves, we will enhance the public’s accessibility to our
datasets. CEDSCI consists of experts from across the Census who work to enhance the Census Bureau’s data dissemination capability, and consequently fosters a user-focused and cost-effective data dissemination environment. Updated in 2017, the project goals include:

- Fostering and maintaining a customer-focused, cost-effective data dissemination environment;
- Promoting a set of dissemination tools to meet future dissemination capabilities;
- Adopting a Customer Experience Management (CEM) system that captures customer interactions systematically and provides for dissemination tools, systems, and processes to evolve based on quantitative assessment of changing customer needs and new technological innovation; and
- Designing shared enabling technologies based on business requirements and needs.

Additionally, Census will continue to foster and maintain a customer-focused, cost-effective data dissemination environment where:

- Its people view dissemination as a shared service and responsibility; engage in active listening; look for ways to strengthen new ideas; and are innovative and risk-taking;
- Its processes provide continuous information about how effectively Census is meeting data users’ needs;
- Its tools are customer-driven and make data easy to access and use; and
- Its information respects confidentiality, and users trust it as a reliable and credible source.

We continue to inventory internal datasets that are restricted and not available to the public through our Data Management System (DMS). This internal data includes our survey data, data from reimbursable, and administrative records (ADREC). Public information is inventoried in data.gov.

**Participation and Collaboration**

The Census uses a number of technologies to promote opportunities for public participation in decision-making processes, and improve collaboration. Census has three chartered advisory committees: the Census Scientific Advisory Committee (CSAC), and National Advisory Committee (NAC), and the Census Bureau 2020 Advisory Committee. Committee members represent the nation demographics and specific fields of expertise, and aids the Census with its mission and innovation goals. The committees provide sound feedback for our operations, programs, methodologies, technologies, outreach, and current and new developments. Census strives to ensure transparency and openness in all of 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 our Census Advisory Committee website, the public can access standard operating procedures, charters, federal register notices, committee recommendations and Census responses, membership bios and contact information, meeting materials, working group guidelines, and other relevant documentation. Our advisory committees' meetings are widely advertised and transmitted via Census Ustream.

Additionally, Census data dissemination professionals are actively engaged in providing data workshops, seminars and site visits with state, local, and tribal governments, community-based organizations, small businesses, rural community groups, inner city neighborhood associations, media organizations, national affiliates, and faith-based organizations.

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

Census also continues to explore ways to make participation in our surveys easy. For example, Census created the Geographic Update Partnership Software (GUPS) 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 state, local, and tribal governments, and it is critical for the acquisition of our partner's boundaries, streets, and addresses.

Census relies on public participation to produce high quality, relevant statistical information. Census Respondent Advocates represent the interests of respondents in Census 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 throughout the agency an increased consideration of respondents' needs when we conduct our censuses and surveys.

Another way we promote participation is during National Sunshine Week. The annual Sunshine Week events offer an opportunity for informal public comments on access to information. Sessions offered during the event highlight all plan components described in M-16-16.

We continue to identify ways to work more collaboratively, and develop partnerships both within and outside of the Census. We foster partnerships with federal, state, local, and tribal governments as well as commercial partners.

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

**Externally:**

American Indian and Alaska Native Programs
Census has two programs, the Boundary and Annexation Survey (BAS) and the Tribal Statistical Areas Program (TSAP) with tribal governments, designed to collect and maintain a current inventory of all legally defined tribal lands, their boundaries and status. In January 2016, Census and the Bureau of Indian Affairs signed an agreement in support of the BAS.

Local Update of Census Addresses Operation

The Local Update of Census Addresses (LUCA) program is the only opportunity offered to tribal, state, and local governments to review and comment on the U.S. Census Bureau's residential address list for their jurisdiction prior to the 2020 Census. Updates from the LUCA program not only benefit many other Census programs that make use of the address list, but also helps communities plan for future needs.

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 29 open Federal Statistical Research Data Center (RDC) locations. The RDCs partner with over 50 research organizations including universities, non-profit research institutions, and government agencies. The RDC’s provide qualified researchers on approved projects with a secure connection to restricted data collected by the Census, the National Center for Health Statistics, the Agency for Healthcare Quality and Research, the Bureau of Labor Statistics, and other federal agencies.

Civic Hackathons

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

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.

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.

**Internally:**

- Census employees use Skype for Business to collaborate in real time. Skype for Business allows employees to share documents during a chat session, schedule online meetings, and collaborate within Microsoft Office applications.
- Census has approximately 160 SharePoint team sites that are used for Division and/or Project level information and collaboration on a daily basis.
- Census uses SharePoint web content and document managing system as a tool to increase our options for collaboration. For example, SharePoint is used to manage all Interagency and Other Special Agreements (IOSA’s).

**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, Census 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 in order to solve problems that affect the community.

Additionally, Census hosts a Vizathon concept competition, wherein Census 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 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 staff to develop data visualization skills.
Access to Scientific Data and Publications

Census stays current by making research the basis of everything we do. Our researchers explore innovative ways to conduct surveys, increase respondent participation, reduce costs, and improve accuracy. They analyze the data we collect and uncover trends that give us a deeper understanding of our complex society.

We publish the following information:

- **Our Researchers**
- **Working Papers**
- **Seminars**
- **Conferences**
- **Research Data**
- **Work With Us**
- **Participate in Studies**

Open Source Software

Census has an open source policy that encourages the use, development and release of open source software. Census makes extensive use of open source software and libraries. There are 141 open source products currently approved for use at Census. This includes 112 “pure” open source product versions, and 29 paid open source product versions that are supported by a commercial vendor such as Red Hat Enterprise Linux. These 141 products comprise 16% of all software products approved for use at Census.

To date, Census has released two open source products, CitySDK (no longer in active development) and The Opportunity Project (TOP). Both products are currently available to the public on GitHub, and both will be uploaded to the federal open source repository:

**The Opportunity Project** is unleashing the power of data and technology to expand economic opportunity in communities nationwide. We are 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 [USA spending.gov](https://usaspending.gov), provides budgetary and financial information to give taxpayers increased visibility and accountability for activities. Part of Census’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 upcoming 2020 Decennial 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’s 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, Census 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 Census. Furthermore, program managers will quickly obtain data on spending in their program areas in order to identify historical trends in 5-year cyclical censuses—as funding levels rise and fall—and to plan in anticipation of needs. In addition, the financial data is available by object classes that categorize how Census 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 as an agency.

**Privacy**

Census remains committed to the principles of transparency and openness while also meeting our responsibilities to privacy compliance. We place stringent requirements on the collection, access, use, dissemination, and storage of personally identifiable information (PII). Census requires annual data stewardship training that covers IT security awareness, Title 13, Title 26, and Privacy Act responsibilities to reinforce our confidentiality and privacy standards. In addition to quarterly Federal Information Security Management Act (FISMA) compliance reports, Census submits PII breach incident reports to the DOC Office of Privacy and Open Government (OPOG). We also provide 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 us.

Census readily makes available to the public information regarding our privacy program. The public can access the following links:

- [Data Protection and Privacy](#)
- [Online Privacy Policy](#)
- [Privacy Impact Assessments](#)
- [System of Records Notices](#)
- [Oath of Non-Disclosure](#)
- [Methods of Preventing Disclosure](#)
Additionally, 15 CFR, Part 4, Subpart B, of the Privacy Act, governs how an individual can request access to and amend their records. Census makes submitting a request transparent and easy by providing information and instructions at census.gov.

Annually, Census 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 our customer’s privacy.

**Whistleblower Protection**

Census continues to take affirmative steps to ensure that employees are informed of their rights and remedies under the prohibited personnel practices and whistleblower retaliation protection provisions of Title 5. Presently, Census has met four of the five 2302(c) Certification Program requirements, including the following:

Placed information posters at all agency facilities:

Census posted fifty-three (53) posters at the following locations: Census-Headquarters; Bowie Computer Center; National Processing Center (NPC)-Jeffersonville; NPC-Hagerstown (closed 2018); NPC-Tucson; and the Atlanta, Chicago, Denver, Los Angeles, New York and Philadelphia Regional Offices.

The posters contained the following information:

- **Whistleblowing:** Defines a “whistleblower” as someone who discloses information he or she reasonably believes evidences a violation of any law, rule, or regulation; gross mismanagement; gross waste of funds; an abuse of authority; a substantial and specific danger to public health or safety.
- **Whistleblower Retaliation:** Asks, “What is whistleblower retaliation?” A federal employee authorized to take, direct others to take, recommend or approve any personnel action may not take, fail to take, or threaten to take any personnel action against an employee because of protected whistleblowing. Cites an example. Defines “protected whistleblowing.”
- **Prohibited Personnel Practices:** Lists thirteen prohibitions, including: whistleblower retaliation; discrimination for engaging in conduct unrelated to work performance, such as discrimination based on gender identity or sexual orientation; and hiring and promotion offenses that offend the merit system.
- **The Hatch Act:** Permitted and Prohibited Activities for Most Federal Employees: Lists permitted and prohibited activities for employees who may engage in partisan activity.
- **Provided information about the 13 Prohibited Personnel Practices (PPPs) and**
whistleblower disclosures to new employees as part of the orientation process.

Two (2) brochures have been incorporated into the New Employee Orientation packets:

- Your Rights As A Federal Employee
- Know Your Rights When Reporting Wrongs
- Provided information to current employees about the 13 PPPs and whistleblower disclosures.

Bureau-wide messages that contain the content provided in the Office of Special Counsel (OSC) sample agency letters are regularly sent to all current employees.

- Trained supervisors on the 13 PPPs and whistleblower disclosures.

On November 3, 2016, the PPP/Whistleblowing Protection Act training course was launched and added to the Commerce Learning Center (CLC) and assigned to all supervisors. All supervisors were required to complete the training by January 31, 2017, with the exception of newly hired supervisors who were given a 3-month deadline to complete the training.

- Displayed a link to OSC’s website on the agency’s website or intranet.

The Census Human Resources Division (HRD) added a link to OSC’s website from the HRD intranet page on December 13, 2016.

Additionally, Census included a question, “I can disclose a suspected violation of any law, rule, or regulation without fear of reprisal” on our Organizational Climate Survey (OCS) that was offered to all Census employees. Asking the question on the OCS, with its accompanying organizational granularity, allows leaders, managers and supervisors to target “No Fear” communications more effectively. Additionally, during our 2016, 2017, and 2018 National Sunshine Week speaker sessions, the OSC has participated in attorney led discussions on merit system principles and prohibited personnel practices and answered questions from employees across federal government.

**Websites**

Over the last four years, the Census has pursued a goal of making census.gov a customer-centric destination that serves as the first stop for economic, demographic, and geographic data. Census.gov is one of the largest websites in the federal government, with over 46 million annual visits and more than a million pages and assets. The site serves a wide range of users, including the public, journalists, educators, students, economists, and researchers. In line with the Open Government Directive, Census aims to facilitate access to its statistics, increase customer satisfaction, and grow its audience.
In keeping with the Digital Government Strategy, census.gov is just one part of our digital transformation. We continue to work to improve and streamline our web applications for data access.

As a direct result of customer feedback, the Census recently updated two key tools on census.gov, search and QuickFacts, with new features to make accessing statistics easier than ever before. With an improved search feature generating better results on census.gov, users can discover a wealth of information and visualizations just by typing key words, such as “median income,” “population” or a particular NAICS code. For example, a search of “California population” will display the latest population statistics along with other popular statistics for California. Users are also able to filter their search by other content types, such as image and videos.

In 2016, the Census updated one of its most popular web tools, QuickFacts. The tool now provides multiple data views, including viewing charts, maps, and statistics for up to six geographies at once, and the ability to share on social media, embed, and download content. Statistics are also now available for Puerto Rico and townships. Users can submit feedback through a “Tell Us What You Think” link that is available on the application. These improvements are aimed at making the Census Bureau’s statistics on our growing and changing nation more accessible to the public than ever before. In May 2017, the tool was updated to improve search engine optimization, offer faster load times and a better mapping experience.

We have taken significant steps towards making our information more accessible to the public. The Census digital transformation strategy addresses the agency’s digital presence, including user experience, search, mobile access, social media, analytics and content management. The strategy envisions digital content that is conceived, developed and delivered to create a positive, customer-centric experience.

Each initiative in the digital transformation program was selected for its alignment with the three digital transformation goals and their affiliated objectives. The goals of the digital transformation program are:

- Increase awareness and access to Census statistics
- Improve customer satisfaction
- Expand our audience

These initiatives are a critical part of the Census Strategic Plan:

Goal 1: Mission Excellence:

Objective 1.1: Collect, process, and release high-quality statistical benchmarks to meet constitutional and legislative mandates.

Goal 2: Customer Service Excellence:
Objective 2.1: Increased effectiveness of stakeholder engagement.  
Objective 2.2: Increased visibility and utility of Census products.

The key components of the digital strategy are:

- **Redesigned census.gov:**
  
  The Census used user research and validation to create an engaging experience online. This encourages exploration of web content and makes the site easier to navigate.

- **Content management system:**
  
  A next-generation digital platform was introduced to present content in a consistent, user-friendly way. It also reduces the burden on internal content contributors.

- **Smart search:**
  
  With new integrated search capabilities pulling information from the Census API, users can get answers and visualizations to the most popular queries on census.gov directly on the search page.

- **Responsive design and web applications:**
  
  Interactive data tools, mobile and embeddable web applications now bring Census content to a wider audience beyond census.gov.

- **Data visualizations:**
  
  Increased use of data visualizations as public products to encourage data exploration and analysis.

- **Customer experience management:**
  
  By consolidating data across all of the agency’s digital platforms, we created a single view of each customer and their behavior. This enables leadership to understand customer behavior and trends and aids in decision-making.

*Census.gov*, received thirty-nine million visits in 2017. The Census Bureau continually pursues a goal of making the site a customer-centric destination that serves as the first stop for economic, demographic, and geographic data. The site serves a wide range of users—from the general public, journalists, educators and students hunting for facts, to economists, academics and researchers conducting sophisticated data analysis. Through census.gov, the Census aims to facilitate access to its statistics, increase customer satisfaction, and grow its audience.
We are excited about the changes we have made to census.gov through the ongoing digital transformation program and we recognize the importance of getting feedback from customers to further understand how the Census can continue to improve its services online in order to meet customer needs. We encourage customer feedback at cnmp.web.comments.list@census.gov and hope to construct a new census.gov site worthy of daily customer interest and exploration. Feedback is analyzed, prioritized and incorporated into the agile project management, in order to have faster and more effective response to customer needs.

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 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. We cross-reference this with the results from other sources for a more complete look at user behavior to inform site improvements.

The Census has implemented a Customer Experience Management Platform (CEM) that brings together key sources of customer interactions on website, social media, call centers, media outreach, stakeholder relations etc. in a dashboard display that allows managers to make informed decisions on customer experience improvements. The platform provides shared, centralized business intelligence, reporting and insight generation from a growing number of Census data sources. The initial approach was to capture and provide insight into customer interactions with Census products, tools, and services. The unique power of this system is the integration of previously stove-piped data sets by ingesting them into a centralized data warehouse and using a common coding schema. This approach enables users to reveal multiple views of the same customer segments across various customer interaction channels such as web, mobile, social, and contact center. The platform was designed and architected to enable the addition of different data sources from across the organization to deliver timely insights into consumer behavior and organizational operations.

The near real-time dashboards and visualizations provided by the CEM platform offer Census leadership a multi-faceted view of customer needs and expectations, regardless of the channel through which the customer interacts with us, or the program or tool they are using. The visualizations encourage and enable deeper exploration, giving leadership real data needed to collaboratively make better customer-focused decisions that ultimately support the Bureau in meeting their mission objectives and creating value for the American Public.

We are constantly gathering user feedback and leveraging the customer experience management platform to guide future digital innovations. The result of the digital transformation strategy will be better delivery of content to Census Bureau stakeholders and the public. Analytics have proved that the most popular content users are looking for on our site falls into four broad categories:
• NAICS/Schedule B/trade reporting information.
• Topics such as population, income, poverty, and other demographic data.
• Geography-based demographic and economic data (i.e., data specific to a city, county, state or other place).
• Data tools such as the Population Clock and QuickFacts are hugely popular among first-time visitors to the site who seek fast answers.

Along with a new data platform at data.census.gov, other enhancements to census.gov are intended to improve access to data and information. The site now offers faceted filtering for improved access to documents, infographics, and other types of content. Users can filter on years, topics, and surveys to help narrow down a list of products. Census has a new platform that provides data visualizations that present data in newer ways to encourage exploration.

Here are some results of our digital transformation:

• Overall Customer Satisfaction rose 10 points, from 55 in April 2012 to 65 in September 2017. In FY18Q2 we deployed a new satisfaction tool with a new rating scale.
• Satisfaction with findability improved by 9 points, going from 55 in April 2012 for Search to 64 in September 2017 for Information Browsing.
• Satisfaction with Navigation improved 13 points, from 55 in April 2012 to 68 in September 2017.
• More than 2.6 million pages viewed within our web applications embedded on other websites to date (2013 through February 2018).

We frequently released updates and upgrades of our most popular data tools. In the past few years, we have substantially improved and simplified access to data in the Population Clock, QuickFacts, and American FactFinder, three of our most popular tools. We have developed embeddable widget versions of many several tools so that users can add them to their own websites. We have developed and released a "smart search" capability, unique among federal agency websites, that provides Google-style overviews and mini-reports in addition to keyword-driven search results.

As the Census looks ahead, the focus remains on providing digital content that delights the customer, improves access to statistics, enables informed decision-making, and continues to transform the Census into a true digital services organization. Our upcoming efforts in this area will include:

• Improving data access across census.gov and specifically through a new data portal and API services at data.census.gov
• Implementing enhanced template designs on census.gov to optimize the user experience.
• Increasing the use of data visualizations.
• Continuing to enhance census.gov and its search to align with agency-wide dissemination initiatives, as well as adding personalization features to appeal to the diverse set of Census stakeholders.
• Additionally, in 2018, the Census established its first Open Government webpage.

Public Notice

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

Externally:

• Crowd-sourcing and idea-generating tools;
• Federal Register Notices;
• Social media (Facebook, YouTube, Twitter, blogs etc.);
• Electronic newsletters;
• Webinars/webcasts;
• Video and slide presentations;
• National conferences and other speaking engagements;
• Census Advisory Committees;
• Foreign Trade virtual town halls;
• Stakeholder meetings;
• Focus groups and surveys; and
• Various data tools and applications.

Internally:

Internally, we use our Intranet as a platform for keeping Census employees informed, and engaging them in Open Government ideas and initiatives. Here are some of the other tools currently in use:

• Idea-generating tools;
• Electronic technology repository for collaboration;
• Director's and Deputy Director’s messages (email, 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;
• Employee newsletter;
• Focus groups; and
• Surveys.

Consistent with the Open Government Directive, Census continues to keep the public informed about its significant activities and business. In order to provide access to a wider audience of stakeholders, 2020 Census Program Management Review meetings continue to be broadcast live on our Ustream channel. Making these meetings available live and archived to all stakeholders (not just those who can) is providing unprecedented opportunities for everyone to learn about details of our plans long in advance of the actual 2020 Census. Along these lines, the Agility in Action 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

Census continues to move forward with implementing an Email Records Management System (ERMS) that will be compliant with federal records capabilities necessary to capture all inbound and outbound email, social media content such as instant messaging, and electronic documents, and store these records using the cloud for storage. The ERMS project will also incorporate the Capstone approach National Archives and Records Administration (NARA) Bulletin 2013-02 for managing email. Census initiated the ERMS project to address the Records Management solution for our e-mail and internal social media communications as mandated by the Federal Information Security Management Act (FISMA). 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 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 our electronic systems. The initiative will follow the Capstone guidance provided by NARA and the DOC, 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 the Office of Management and Budget (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.

Census has begun work with NARA concerning the archiving of 2020 Census records, and NARA is already working towards the release (in 2022) of the 1950 Census individual records.
Although records management under M-16-16 focuses on the agency internal records management processes, Census also contemplates how its information is managed externally. The Census WikiData project takes a proactive approach to ensure that the public gets the most up-to-date data and information on the Census. Wikidata powers data and statistics within Wikipedia. The project consists of the development of a system that will connect the Census 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, Census will work to ensure that Wikipedia presents the latest Census information.

**Freedom of Information Act Requests**

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

The ability for customers to know whom to contact for help or service and how to contact those individuals remains important to us. We provide contact information for our FOIA staff on our public web site at [http://www.census.gov/about/policies/foia/contact.html](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. We also have 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, we have 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 FOIA staff processes requests.

Continuing our focus on the customer, Census 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.

Census FOIA staff continue 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 help us establish staff training needs.

Information about FOIA requests submitted to and fulfilled by Census FOIA professionals are available to everyone with access to the internet through FOIAonline. The FOIAonline system continues to allow Census to provide better case management, audit and tracking capabilities for
both the Census and the requester community. Detailed information about our FOIA program is available at the [Census FOIA home page](http://www.census.gov/about/policies/foia/foia_library/custom_tabulations.html).

**Proactive Disclosures**

Census continues to post frequently asked requests in the [Freedom of Information Act (FOIA) electronic library](http://www.census.gov/about/policies/foia/foia_library/congressional_correspondence_logs.html). Consistent with the FOIA Improvement Act of 2016, Census continues to take steps towards ensuring openness and transparency by systematically posting material of interest, including 2020 Decennial information, immediately. Census uses [FOIAonline](http://www.census.gov/about/policies/foia/foia_library/congressional_correspondence_logs.html) as our main tool for managing, tracking, and assessing records fit for public disclosure.

Additionally, the FOIAonline system allows the Census to collaborate with agency staff outside of the FOIA office by allowing:

- Departmental FOIA staff to review Census FOIA cases, and task or assign 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 FOIA staff reviews FOIAonline to make a determination on 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/topics.html)
- [http://www.census.gov/about/policies/foia/foia_library/congressional_correspondence_logs.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/policies.html)

**Congressional Requests**

Census receives congressional inquiries by phone, letter, fax, and via the Internet. The inquiries generally involve constituent-related survey issues, program policies, or requests for program or agency information. The Office of Congressional and Intergovernmental Affairs (OCIA) advises the Census’s Director, senior executive staff, and program areas on congressional, intergovernmental and tribal affairs, and correspondence management. OCIA also advises Congress and tribal and intergovernmental associations on Census programs and policies, and is responsible for responding to Census data inquiries from Congress.
Additionally, congressional correspondence logs are processed through the FOIA office and proactively disclosed at the Census FOIA home page.

**Declassification**

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

**Census Open Government Initiatives**

The table below shows a list of initiatives for Census.

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**Project - Innovation and Operational Efficiency**

The Census implemented the Innovation and Operational Efficiency (IOE) program in 2010 to engage employees in identifying opportunities to increase efficiency and reduce cost in Census operations. With over 3400 ideas submitted since 2010, and over 100 improvement teams working 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.

In January of 2018, employees submitted 159 ideas, and over 2,000 unique users participated across the Bureau. To date the IOE Program has achieved over 44.6 million dollars in savings and cost avoidance to for the Census.

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

*What’s New – Providing important data series through Data.gov using the ODP New IAI*
The Census is publishing current datasets to data.gov as identified on a flow basis. Previously published records for Census products are reviewed regularly for date of last update and link validation.

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

*What’s New – Presentation tools improve understanding and use of Census data*

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 *OnTheMap* web application, which allows graphical analysis of the relationship between residence and workplace locations on user-defined maps. The latest version includes additional years of data and functionality, including improvements to the cartography and updating the base geography to TIGER 2016.

In May 2017, Census released version 4.4 of *OnTheMap 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. It now includes selected characteristics from the most recent ACS.

The LEHD program has also successfully completed two pilot data visualization projects for displaying the Quarterly Workforce Indicators (QWI), which include employment, job creation, earnings, worker turnover, and hires/separations, by different levels of geography, industry, business characteristics, and worker demographics. In 2014, *QWI Explorer* was released, an analysis tool that allows users to construct visualizations (charts and tables) to compare, rank, and aggregate indicators across time, geography, and/or firm and worker characteristics. Users can download their analyses to an Excel spreadsheet, a PNG/SVG chart image, or a PDF report, or they can share data tables and visualizations via URLs and through social media. A 2017 update to QWI Explorer enabled comparisons for state totals and yearly averages. Meanwhile, in 2017, Census released a beta version of *Job-to-Job Explorer*, a web-based visualization tool featuring the newest LEHD product, Job-to-Job-Flows. This tool allows users to construct tables, maps, and charts that compare, aggregate, and analyze worker reallocation, including job change, hires and separations from and to nonemployment, and characteristics of origin and destination jobs, by worker and firm characteristics.

**Project - Application Programming Interface (API)**

The Application Programming Interface (API) makes key demographic, socioeconomic, and housing statistics more accessible than ever before. The API lets developers customize Census statistics into Web or mobile apps that provides users quick and easy access from more than sixty popular sets of statistics including:
- The 1990, 2000, and 2010 Decennial Census, which include detailed statistics on population age, sex, race, Hispanic origin, household relationship and owner/renter status, for a variety of geographic areas down to the level of census tracts and blocks.
- American Community Survey (ACS): Several vintages (currently spanning from 2009-2016) of the ACS (one, three, five year, and supplemental estimates), which include detailed statistics on a rich assortment of topics (education, income, employment, commuting, occupation, housing characteristics, and more) down to the level of census tracts and block groups.
- Economy-wide Keyed Statistics from Economic Census, which includes statistics on establishments, employees, receipts, and payroll for all industries. The API also includes data on an annual basis from County Business Patterns and Nonemployer Statistics.
- Population estimates, which includes statistics that are the timeliest measure of current population available.
- Economic Indicators Time Series – which provide monthly and quarterly data that offer comprehensive measures of the U.S. economy.
- New Geographical APIs
- And many more...

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

Project - Implementing the Federal Digital Strategy

What’s New – Census is fully embracing the business intent of the Federal Digital Strategy for open data, a cost effective mobile strategy, and improving the enterprise architecture and infrastructure to manage the complete data lifecycle.

Census continues to work diligently towards a 21st century digital ecosystem. We continue to support the digital government strategy (DGS) through our API’s, and in the migration to an "information-centric" content management system (CMS), and improving search and navigation for our website visitors. We also continue our 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.

Census’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 through data dissemination. Census will continue to evolve our 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 Census.

- Interoperable systems - Improving how our systems exchange data with one another
- Mobile Flexibility - Strengthening IT infrastructure through modern, scalable tools and software
- API by Default Policy (CIO) - Publishing consistent standards to enable reuse and savings

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

The ACS Data User Group, was formed in 2013 to improve understanding of the value and utility of ACS data, as well as to promote information sharing among data users about key ACS data issues and applications. As of April 2017, the online community forum has grown to 2,070 ACS data users, which is double the over 1,000 members since the 2015 conference.

In addition, the third ACS Data Users Conference was held May 11-12, 2017, at the U.S. Patent and Trademark Office in Alexandria, VA. The conference was organized by the Population Reference Bureau (PRB) in partnership with Census Bureau staff in the American Community Survey Office. About 300 ACS data users attended the conference, which included nearly 50 contributed presentations by ACS data users, invited sessions with Census Bureau staff, informal roundtable discussions, and opportunities for networking.

As a result of feedback from the conference held in 2015, the 2017 conference venue was accessible by metro, luncheon roundtable discussions remained on the agenda, and the presentation slides were sent to the participants in advance of the conference. Holding the third conference two years after the second conference resulted in a large number of abstracts -- 70 abstracts were received. This enabled PRB and the ACS Data Users Group Steering Committee to select high quality presentations that covered many different topics for the 2017 conference. [In comparison, 80 abstracts were submitted for the first conference in 2014, and only 48 abstracts were submitted for the second conference, only 12 months later in 2015.] Also, PRB created a hashtag (#ACSConf17) that they promoted with registration materials and through email. There were 194 tweets using the designated conference hashtag for the 2017 conference, compared with 41 tweets for the 2015 conference.

Finally, on the point of improving ACS data products, the Census Bureau launched a new initiative beginning in Fiscal 2016 to establish a Data Products Redesign Group (DPRG). Via a contract established with the Population Reference Bureau, the Census Bureau will leverage this informal, non-advisory group to help collect feedback from stakeholders and data users on new, innovative data products and dissemination channels. The DPRG’s work may include conducting user surveys, focus groups, and/or other methods to elicit input from a range of stakeholders and data users representing the spectrum of skill levels and interest.
areas in the use of ACS data products. Topics include content, geographic usage, supporting documentation, and accessibility and dissemination channels for the products.

In early FY16, ACS initiated an evaluation and potential redesign of the ACS data product lines. The plan looks at four major pieces of the ACS data products: current ACS data product line; filtering and thresholds; dissemination methods; and end user outreach. The latest update on the Data Product Redesign Plan can be found at: http://www.census.gov/programs-surveys/acs/operations-and-administration/2015-16-survey-enhancements/data-products-redesign.html

The first significant data product changes as the result of the redesign effort were released in July 2016. After evaluating the feedback received from DPRG, and considering the usage metrics, predicted usage, filtering rate, and input from subject matter areas, ACS created a subset of 1-year tables to be produced for geographies with population of 20,000 or more. These tables are simplified tables that can be released for lower levels of geography while maintaining the quality of the estimates. These tables give users more timely information on an annual basis and more than doubles the geographic coverage of the ACS 1-year data.

The Census Bureau also released a subset of detailed tables with estimates and the associated eighty variance replicate estimates for 11 geographic summary levels. This additional information makes it possible for data users to compute variances using a methodology similar to the one utilized by the Census Bureau in ACS production. These variance replicate estimates are intended for advanced users to calculate Margins of Error (MOEs) for their own defined characteristics without using the approximation formulas. This includes forming their own aggregate estimates across geographies or within table as well as custom defined ratios, proportions, and percentages.

In early July 2017, ACS released new estimates for detailed race, Hispanic Origin, ancestry, and tribal population groups. These statistics, available from the 2011-2015 ACS 5-year Selected Population Tables and 2011-2015 ACS 5-year American Indian and Alaska Native Tables, provide the greatest level of statistical information for detailed population groups.

To ensure future enhancements and changes to ACS data products are customer-focused, the ACS program continues to engage the data user community. In September 2017, a feedback form about the ACS data products was posted on the ACS Data User Online Community. Data users could provide suggestions for improving the ACS data products, including various data product types, documentation and access of data and information. These user comments gathered from the survey served as critical input to the annual data products review. Sub-teams from the Census Bureau accessed, evaluated detailed user comments and identified potential improvements, which will be announced to the data users in May 2018.

Project - Agility in Action - A New Research Agenda to Enhance the ACS
In June 2015, the Census published the plan, *Agility in Action: A Snapshot of Enhancements to the American Community Survey*. In 2017, *Agility in Action 2.0* was published.

Agility in Action describes enhancements that the Census is making to the American Community Survey (ACS) to ensure that it continues to deliver deep public value to our nation’s communities. The audience for the plan is a broad one that ranges from the American public to data users from diverse sectors such as business, academia, and local government. Knowing how critical the ACS is to the strength of our nation, the Census is constantly looking for ways to ensure that our customers trust and value the survey, so sharing the Census work on enhancements is critical.

The plan describes a series of activities that will take place. The Census will be engaging in numerous activities to not only enhance the ACS, but also build and maintain customer support and awareness of this comprehensive survey. Largely focused on providing a positive experience for our customers, the Census is working 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 our country demands and deserves. The research and activities that the Census is currently pursuing to accomplish these goals include:

- Evaluating the Availability and Suitability of Other Data Sources
- Reducing Follow-Up Contact Attempts to ACS Respondents
- Testing of ACS Mail Materials Messaging
- Evaluating Modifications to Survey Questions to Reduce Respondent Burden
- Evaluating Methods to Ask Questions Less Frequently or of Fewer Respondents
- Communicating with Respondents on Why We Ask Questions
- Data Use Awareness
- Subject Matter Expert Engagement
- Respondent Advocacy
- Implementing a Communication Strategy with ACS Stakeholders

The Census will release regular updates on its progress in addressing these research areas in the coming months and years. As the Census pursues the *Agility in Action* activities, a priority continues to be that the Census constantly improves the ACS survey experience for respondents, while maintaining the high quality of ACS estimates supporting every community and small population group in the nation.

**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, small area health insurance estimates, 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 SAIPE, SAHIE, and the International Database.

Project - Census Flows Mapper

The Census Flows Mapper is an interactive on-line mapping and data dissemination tool that provides access to county-to-county migration data from the American Community Survey. 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 Flow 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 our 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. Census Flows Mapper also provides the ability to download the map display in Portable Document Format (PDF).

The on-line display and PDF map adhere to standard cartographic design principles, providing the user with the ability to produce cartographically sound maps for inclusion in reports and presentations. For more information, please visit: http://flowsmapper.geo.census.gov/index.html

Project - TigerWeb

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 Topologically Integrated Geographic Encoding and Referencing (TIGER) database— the Census 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 tabulates data, a data user would have to access multiple reference map types and series. TigerWeb’s on-line 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 and for use in applications. For more information on TigerWeb, please visit: http://TigerWeb.geo.census.gov/TigerWebmain/TigerWeb_main.html

Project - Live Webcasting Public Events

In order to provide greater public access to information about our major programs and activities, Census continues to live broadcast a variety of events. For example, the 2020 Census Program Management Review meetings, updates from National Advisory Committees and expert meetings about Income, Poverty and Health Insurance statistics, the Middle Eastern and North African population, and the Secretary’s Commerce Data Advisory Council. Additionally, Census webcasts select Department of Commerce activities.

Project - Prepare 2020 Census Operational Plan

The Census baselined the 2020 Decennial Census Operational Plan version 3.0 at the end of September 2018. Producing and sharing this plan almost five years before the next census, and three years earlier than for the 2010 Census, will provide all 2020 Decennial Census stakeholders a real opportunity to understand and comment on how the Census plans to conduct the 2020 Census; what will be different from the past; and provide a roadmap and timeline for work that still needs to be done. As the initial version of an emerging concept of operations, it reflects and supports evidence-based decision making by describing design concepts and their rationale, identifying decisions still to be made, and describing significant issues and risks related to the implementation of the Operational Plan.

The Census continues to release Detailed Operational Plans for each of the operations for the 2020 Census on www.census.gov. Each operation of the 2020 Census will describe 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 Census’ detailed plans.

Each document describes the objectives and procedures for all aspects of each individual 2020 Census operation. Each Detailed Operational Plan will be updated over time to reflect changes in
strategies that result from census planning, research, and testing activities. A memorandum accompanying the release of each operation’s Detailed Operational Plan is at cenus.gov

The first of the series, 2020 Census Detailed Operational Plan for the Address Canvassing Operation, was released to the public in December of 2015.

**Project - QuickFacts**

QuickFacts continues to be one of the most popular and widely used tools on cenus.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 re-imagined QuickFacts, which can be found in a beta version at www.census.gov/quickfacts. The interactive QuickFacts beta has a number of 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, in an effort to continue growing the agency’s customer base, users can also now embed QuickFacts on their websites and share it in social media. Furthermore, new data has been added. For the first time, QuickFacts now includes profiles for townships and locations in Puerto Rico.

Launched in 2015, to date in 2018, the QuickFacts tool has received more than 7,954,388 visits. Census 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 Census Geocoder provides web services for geocoding addresses nationwide. The geocoder uses the publicly available TIGER/Line 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 Response Outreach Area Mapper (ROAM) 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 will help communities tailor their outreach efforts that encourage residents to mail in their census forms. The application launched in February 2018.
Project - 2020 Census Memorandum Series

The 2020 Census Memorandum Series documents 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 generally will be added to this series for any decision or documentation that meets the following criteria:

- A major program level decision that will affect the overall design or have significant effect on the 2020 Census operations or systems;
- A major policy decision or change that will affect the overall design or significantly impact the 2020 Census operations or systems; and
- A report that documents the research and testing for the 2020 Census operations or systems.

For the latest releases, please visit: https://www.census.gov/programs-surveys/decennial-census/2020-census/planning-management/memo-series.html

Project - Developing Better Estimates of E-commerce Economic Activity

In 2017, the Census Bureau introduced a supplemental annual retail e-commerce table, providing data users with additional information about retail e-commerce activity such as e-commerce sales generated from online divisions of brick-and-mortar retailers and better informing data users of trends in e-commerce. The new e-commerce product addresses some concerns and misconceptions that data users and media outlets have about retail e-commerce data. Additionally, given that e-commerce is dynamic, ever changing, and first released in 1999, the Census Bureau was poised to evaluate new ways of presenting and measuring retail e-commerce activity in the U.S. As we continue to refine e-commerce activity for our quarterly estimates, we are meeting with various stakeholders to discuss and gather information on the definition of e-commerce, as well as how e-commerce is currently presented, and ideas for how it could be presented in the future to better meet needs for more timely and granular data on e-commerce sales.

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

Census Bureau business survey respondents will utilize a new interface when submitting responses called E-Correspondence. The new system allows respondents to access self-service options, send and receive secure email, 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 email, 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 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 email over more costly options such as paper mailing and phone calls. The system is currently in use for 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 U.S. 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. In addition, we are assessing the feasibility of accelerating the manufacturing indicators.

**Project - Emergency Management Economic Recovery**

During the last hurricane season the United States was impacted by four storms: Harvey, Irma, Nate and Maria. Millions of people and businesses were adversely impacted by these storms. The Census Bureau reacted quickly to partner with other Commerce agencies such as NOAA, BEA, and ESA in conjunction with FEMA to supply demographic and economic data on the impacted areas. Census was part of a number of different working group with emphasis on Economic Recovery:

- Economic Recovery Support Function (RSF)
- Health and Social Services RSF
- Community Planning and Capacity Building RSF
- Puerto Rico RSF Leadership Group
- Data Analysis Coordination
- Modeling Data Working Group
- Subcommittee on Disaster Reduction

Census produced over 1,200 maps and reports covering over 600 counties, municipios and cities impacted by the four hurricanes and California wildfires in 2017. These maps and reports were
produced using publicly available Census tools and were posted to the census.gov Emergency Preparedness page. Numerous trainings and webinars were conducted to teach emergency management professionals at the federal, state, and local level how to use these tools.

These recovery efforts will continue into the next hurricane season and for years to come. Census continues to expand its partnership efforts and make the Census data that's needed more accessible to the Emergency Management Community.

**Project - Webinar Series**

The Economic Directorate has begun a series of webinars designed to make the general 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 Census across all directorates. These monthly webinars are also recorded and can be accessed anytime on census.gov. Webinar’s include:

- Health Care
- Employment
- Government
- Construction
- Professional and Scientific
- Hidden Gems

**Project - The Opportunity Project**

The Opportunity Project (TOP) is a process for engaging government, communities, and the technology industry to create digital tools that address our greatest challenges as a nation. This process helps to empower people with technology, 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 non-profits 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 U.S. Census follows the Federal Advisory Committee Act (FACA), which governs the establishment and operation of advisory committees. Currently, our agency has two chartered advisory committees: the Census Scientific Advisory Committee (CSAC) and the National Advisory Committee on Racial, Ethnic and Other Populations (NAC). Having committee members representing the nation demographics and specific fields of expertise,
aids the agency with its mission and innovation goals. The committees provide sound feedback for our operations, programs, methodologies, technologies, outreach, and current and new developments.

Our 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 for commentary at all the proceedings, in person or in writing. At our Census Advisory Committee website, which follows Open Government guidelines, the public can access the following: standard operating procedures, charters, federal register notices, committee recommendations and Census responses, membership bios and contact information, meeting materials, working group guidelines, and other relevant documentation. Census advisory committee meetings are widely advertised and transmitted via Census Ustream. Visit our website to find more information related to our advisory committees.

**Sunshine Week Event**

Each year the Census 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. The 2016-2018 events included participants from federal agencies, non-profits, the private-sector, academic institutions, media, and the public.

**Privacy Day Event**

Privacy Day is an annual event that provides a forum for Census 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 our customer’s privacy.
Census Featured Initiative – CEDSI

“We can use modern tools and technologies to seize the digital opportunity and fundamentally change how the Federal Government serves both its internal and external customers—building a 21st century platform to better serve the American People.” This is the vision of the Federal Digital Strategy that the CEDSCI follows.

The CEDSI program has continued to help Census foster and maintain a customer-focused, cost-effective data dissemination environment. To that end, Census continues to lead the federal community in releasing statistical data and products to meet the needs of a complex and disparate user base, allowing these groups to make better data-driven decisions based on credible statistics, easy-to-use tools, and standardized data elements.

The Census Enterprise Data Collection and Processing system (CEDCAP) is a program responsible for the development and integration of an enterprise system of systems to improve the data collection and processing phases of the survey lifecycle. Together, CEDSCI and CEDCAP are modernizing the way Census does business.
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 tool box 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.
*Note: EDA has been proposed for elimination in the FY 2019 President’s Budget.

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 data tools and research reports that EDA makes freely available on its website.

For prospective grantees, EDA makes all funding opportunity notices available on www.grants.gov and its website: https://www.eda.gov/funding-opportunities/. 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 (https://www.eda.gov/about/resources-for-grantees.htm). 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 2016, economic development tools and reports, and a state-by-state directory of economic development resources are also available on www.eda.gov.

Most recently, EDA partnered with SRI International to develop innovative metrics as part of a new performance measurement and program evaluation framework. The project uses logic and econometric models to assess the 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 toolkit for the economic development practitioners’ use. The toolkit corroborates the selected 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 to the report and toolkit for non-infrastructure grants, SRI conducted a national-level assessment of the impact of EDA infrastructure grants. Using REMI’s PI+ model, that generates year-by-year estimates of the effects of a given policy initiative, SRI explored the potential impact of infrastructure grants across three economic outcome variables: employment, wages and salaries, and personal income. The report Innovative Metrics for Economic Development: Supplemental Report offers a new lens of analysis for the practitioners looking to maximize the impact of their infrastructure projects.

These and many other innovative economic development data are available on EDA’s website (https://www.eda.gov/) and EDA’s new in 2018 Performance Measurement and Program Evaluation page.
Privacy

In April 2017, EDA completed construction of a Freedom of Information Act (FOIA) reading room to proactively disclose the most frequently requested documents. EDA has already placed over 4,000 pages of materials on the webpage. The reading room can be found at https://www.eda.gov/foia/disclosures/.

In April 2017, EDA completed construction of new webpages to communicate its privacy policy for the EDA.gov domain (https://www.eda.gov/privacy/policy/) as well as its privacy program (https://www.eda.gov/privacy/). EDA’s webpages are now fully compliant with the 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, www.eda.gov. Through this website, EDA disseminates information related to economic development to the public, communities, and prospective and current grantees. The website complies with the Department’s policies and best practices. EDA follows the Department’s digital strategy, which can be found at: https://www.commerce.gov/page/digital-strategy.

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, including entering the financial data into the Commerce Business System (CBS), the Department’s financial system. As such, NOAA submits all data on behalf of EDA, including additional financial information to USAspending.gov after undergoing a validation process. EDA transitioned its grants data to the new format in January 2017 and the first upload of additional data was in May 2017. EDA will continue submitting its grant records to USAspending.gov in compliance with the requirements of the DATA Act.
Transparency

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, the EDA blog, its twitter feed @US_EDA.

Records Management

EDA’s records management specialist takes lead responsibility for ensuring EDA complies with all applicable record retention and archival regulations. EDA has recently begun an effort to modernize our records management practices to ensure that we are appropriately disposing of our Regional Office records in appropriate timeframes while preserving those records necessary for post-award monitoring, consistent with Department-wide policies. EDA is following the Department’s guidance on moving to a process to manage permanent electronic records electronically.

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. In April 2017, EDA completed a complete overhaul of its FOIA webpages to more effectively communicate information related to FOIA, how to make FOIA requests, and to implement a FOIA reading room to proactively disclose the most frequently requested documents. EDA has already placed over 4,000 pages of materials in its reading room. General FOIA information can be found at https://www.eda.gov/foia/ and the reading room can be found at https://www.eda.gov/foia/disclosures/.

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 in the data by design database. 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 prevents 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.

**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. 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.

Also, illustrative of EDA’s significant public engagement is EDA’s National Advisory Council on Innovation and Entrepreneurship (NACIE), charged with identifying and recommending solutions to issues critical to driving the innovation economy, including enabling entrepreneurs and firms to successfully access and develop a skilled, globally competitive workforce. NACIE serves as a vehicle for ongoing dialogue with the entrepreneurship and workforce development communities, including working with business and trade associations, and reporting its advice to EDA.

Finally, this year EDA requested comments on two major proposed regulations governing one of EDA’s grant programs and a new loan guarantee program. The process was conducted through Regulations.gov.

**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:

- **Silo-Busting:** Removal of the bureaucratic and administrative barriers, and facilitating direct, ongoing communication and collaboration across Federal agencies and program offices.
- **Enhanced, Responsive Service Delivery:** Responsive to locally-identified economic development needs and objectives, and providing the necessary level of project support and related guidance.
- **Strategic, Integrated Investments:** 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 [https://www.eda.gov/edi/](https://www.eda.gov/edi/) and [https://www.eda.gov/edi/what-is-edi.htm](https://www.eda.gov/edi/what-is-edi.htm).

**EDA Open Government Initiatives**

The table below shows a list of initiatives for **EDA**.

<table>
<thead>
<tr>
<th>Operating Unit</th>
<th>Project</th>
<th>Status</th>
<th>Estimated Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDA</td>
<td>FOIA Reading Room</td>
<td>Complete</td>
<td>April 2017</td>
</tr>
<tr>
<td></td>
<td>Update of EDA’s Privacy Program</td>
<td>Complete</td>
<td>April 2017</td>
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<tr>
<td></td>
<td>Launch of New Performance Measurement and Program Evaluation Webpage</td>
<td>Complete</td>
<td>February 2018</td>
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**Project – FOIA Reading Room (April 2017)**

In April 2017, EDA completed construction of a Freedom of Information Act (FOIA) reading room to proactively disclose the most frequently requested documents. EDA has already placed over 4,000 pages of materials on the webpage. The reading room can be found at [https://www.eda.gov/foia/disclosures/](https://www.eda.gov/foia/disclosures/).
Project – Update of EDA’s Privacy Program (April 2017)

In April 2017, EDA completed construction of new webpages to communicate its privacy policy for the EDA.gov domain (https://www.eda.gov/privacy/policy/) as well as its privacy program (https://www.eda.gov/privacy/). EDA’s webpages are now fully compliant with the 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.

Project – Launch of New Performance Measurement and Program Evaluation Webpage (February 2018)

EDA launched a new Performance Measurement and Program Evaluation webpage in February 2018 (https://www.eda.gov/performance/) that makes publicly available information on how EDA evaluates the success of its programs and numerous research reports and tools. This information assists the public in understanding how EDA operates and provides best practices and data to maximize the impact of local economic development infrastructure and non-infrastructure investments.
Minority Business Development Agency (MBDA)

MBDA is an entrepreneurially focused organization committed to wealth creation in minority communities. MBDA was created to foster the growth and global competitiveness of U.S. businesses that are minority-owned.

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 Centers located throughout the Nation. The Centers provide minority entrepreneurs with one-on-one assistance in writing business plans, marketing, management and technical assistance, and financial planning to assure adequate financing for business ventures.

The Centers are staffed by business specialists who have the knowledge and practical experience needed to run successful and profitable businesses. Business referral services are provided free of charge. However, the network generally charges nominal fees for specific management and technical assistance services. The Centers are located in areas with the largest concentration of minority populations and the largest number of minority businesses.

Open Data

In 2018, MBDA revised the MBDA Business Center client engagement and client intake forms to enable the sharing and use of minority business data with federal agencies for research purposes. The forms provide notice to minority business enterprises on the collection and use of the data provided to the MBDA Business Centers.

Privacy

The MBDA completed the annual FISMA report and the Federal Agency Data Mining report (Questions 1 and 6 in the FISMA report). These reports were submitted through the Senior Agency Official for Privacy, (i.e., Executive Council for Privacy, through the Department’s Chief Privacy
Officer). MBDA also provided 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 2017 FOIA Annual Report, the average number of days to respond to a simple FOIA request was 19.4 days. MBDA did not receive complex requests.

The MBDA FOIA Officer requests staff to conduct electronic searches on an office-wide and network level as an alternative of having each person who may have responsive records conduct an electronic search. In addition, MBDA has added one staff person to assist with the document imaging, scanning, and management to reduce time FOIA professionals spend on the administrative activities of the FOIA program. MBDA has attached the President’s FOIA Memorandum, the Attorney General’s FOIA Guidance, and the Department’s FOIA regulations to the MBDA website as a reminder of the presumption of openness http://www.mbda.gov/freedom-information-act-reading-room.

**Proactive Disclosures**

The MBDA has utilized FOIAonline to process all FOIA requests since the beginning of FY2013. If a requestor submits a request other than through FOIAonline, MBDA uploads the request into FOIAonline 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, they are publicly disclosed electronically through FOIAonline.

The MBDA is in the early phases of an ongoing initiative to process, analyze and scan previous and current applications submitted by business center grantees for upload on the MBDA website as a proactive disclosure. Grant applications are frequently the subject of FOIA requests.

**MBDA Open Government Initiatives**

The table below shows a list of initiatives for *MBDA.*
Table 7 - MBDA Initiatives

<table>
<thead>
<tr>
<th>Operating Unit</th>
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<td>MBDA</td>
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<td>On-Going / Continuous</td>
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<td></td>
<td>Support of BusinessUSA.gov Project</td>
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<tr>
<td></td>
<td>Business Development Tools Modernization Project</td>
<td>In Progress</td>
<td>August 2019</td>
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</table>

**Project – Support of SelectUSA.gov**

*What’s new – Integration of information regarding SelectUSA.gov*

The MBDA continues its promotion of SelectUSA.gov initiatives on the MBDA.gov website and participates in all SelectUSA events. MBDA promoted the 2018 SelectUSA Investment Summit on the MBDA.gov website and maintains a blog page that references all SelectUSA activities with active hyperlinks.

**Project – Support of BusinessUSA.gov Project**

*What’s new – Integration of MBDA programs and services with BusinessUSA.gov*

The MBDA is continuing its participation on the BusinessUSA.gov steering committee to provide a one stop destination of all federal programs that support small businesses. MBDA’s role in this effort has been to ensure that its programs and other information specific to minority business enterprises are included in the BusinessUSA.gov portal. The first iteration of was released on February 17, 2012. Since the first iteration of BusinessUSA.gov in February 2-12, MBDA and the BusinessUSA steering committee have been working on functionality and enhancements to improve the user experience for the portal.

**Project – Business Development Tools Modernization Project**

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

In MBDA’s continuing efforts to modernize its business development tools, MBDA has acquired access to the ITA subscription to the Salesforce cloud-based application for customer relations management. MBDA’s access to the salesforce licenses in 2017 will continue its use of the customer management system built on Salesforce’s platform since 2016. Salesforce use will further the MBDA goals increasing MBE access to financing and procurement opportunities by providing an efficient, and flexible cloud based solution for monitoring and developing customer relationships.
The MBDA continues to identify advanced technology that can be used to enhance or replace the suite of business development applications that reside on the MBDA portal. Historically, these tools have been used by Minority Business Enterprise’s (MBE), and MBDA Business Centers to support activities associated with their business. Although visitors to MBDA’s portal actively use these tools, the agency has determined that there are more modern tools that could be used to improve the effectiveness of and ensure a first class experience for visitors to the site. Newer tools will provide visitors with access to a virtual space that can be used to grow their businesses and will also allow visitors to tailor the site to their individual business needs. The ultimate vision for the initiative will be to increase MBE access to financing and procurement opportunities existing within the public and private sector.
National Institute of Standards and Technology (NIST)

NIST, founded in 1901, is a non-regulatory federal agency within the Department of Commerce. 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

NIST Public Access Plan

In response to the Memorandum from the Executive Office of the President to the Heads of Executive Departments and Agencies: Increasing Access to the Results of Federally Funded Scientific Research, dated February 22, 2013, NIST developed a Public Access Plan that was approved by the Office of Science and Technology Policy (OSTP) and the Office of Management and Budget (OMB) in December 2014. NIST phased in its public access plan, beginning with intramural and moving to extramural research. All public access requirements are now implemented. Within the constraints of its mission and funding, 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 now included in all 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 NISTIR 8084. NIST’s Public Access Policy, which was derived from the plan, is available at https://www.nist.gov/open.

Improved Access to Publications and Archival Materials

NIST has partnered with the National Institutes of Health (NIH) to use the PubMed Central (PMC) 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) govinfo.

NIST, formerly the National Bureau of Standards (NBS), has worked with The Internet Archive under an arrangement with the Library of Congress to digitize over 20,000 technical reports the agency has published over the last 100+ years. The digitization of this collection of NBS/NIST technical publications will be completed by the end of fiscal year 2018. As the publications are digitized, they are made accessible to the public through appropriate sources:

- WorldCat, https://www.worldcat.org/
- The Internet Archive, https://archive.org/details/NISTresearchlibrary
- Internet search engines.

Photographs and other materials portraying NBS/NIST history are made available to the public through the NIST Digital Archives, https://www.nist.gov/digitalarchives. 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.

**Improved Access to Research Data**

When the OSTP memo was released in 2013, NIST had an existing infrastructure to support review and release of publications, but did not have an analogous infrastructure for data. To enhance NIST’s ability to store, exchange, and disseminate NIST research data with external stakeholders and the public, as well as between NIST technical staff and their immediate collaborators, NIST has made fundamental and foundational improvements to its data management infrastructure. NIST has developed a tool for data management that helps create specific plans for storing, archiving, and accessing research data. NIST’s enterprise data inventory, which functions like a card catalog, can link to a data management plan (DMP) and upload datasets to a secure repository in the cloud, assign Digital Object Identifiers (DOIs), and allow review and approval prior to release of information to the public. Information about available data is sent to data.gov. NIST research data is accessible through links on data.gov, the “card catalog” for government data, and through a portal on NIST’s website.

Recognizing the importance of collaboration for scientific research efforts, NIST’s CIO has authorized the use of several collaboration tools for sharing information with internal and external colleagues. Most recently, the NIST CIO introduced a streamlined authorization process for NIST organizational units seeking to use additional collaboration tools. Staff now have access to lists of tools that are available and those in the assessment and authorization process via an internal website, making the process more transparent.
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 materials 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 (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 and the International Bureau of Weights and Measures (BIPM) to provide federated discovery and access to the world’s knowledge about the science of making measurements.

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 https://www.nist.gov/privacy, and Privacy Impact Assessments are available through a link on that site and at http://www.ossec.doc.gov/opog/privacy/NIST-pias.html.

Whistleblower Protection

The 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 a content management system (CMS), which included access to an improved database of research papers authored or co-authored by NIST researchers. 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 240,000 subscribers who receive information on approximately 108 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 migrated its central web pages from a proprietary CMS to Drupal, an open source CMS. The website allows greater flexibility in the functionality of NIST internal and external web pages. It is hosted in the cloud, which allows NIST to meet the public’s current and future needs.

In 2016, NIST launched a new blog, *Taking Measure*. Through this blog, we write about trends in measurement science and technology, and discuss *why* we do the work that we do (and why we like it so much).

NIST has created sites on YouTube (more than 8,500 subscribers, more than 1.8 million video views), Facebook (more than 63,000 “followers”), Twitter (more than 41,000 “followers”), LinkedIn (almost 26,000 followers), and Instagram (more than 450 followers since launching in August 2017). 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 prizes 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 showcase to one another; others have a winner who receives public recognition. Examples of recent and ongoing challenges include:

- **Global City Teams Challenge**
- **NIST Transactive Energy Challenge**
- **Post-Quantum Cryptography Standardization**
- **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:

- **Agile Robotics for Industrial Automation Competition (ARIAC)**
- **2018 Reusable Abstractions of Manufacturing Processes (RAMP) Challenge**
- **The Unmanned Aerial Systems Flight and Payload Challenge**
Virtual Reality Heads-Up-Display Navigation Challenge

NIST The Future of Public Safety Technology 100k Video Series

NIST Virtual Public Safety Test Environment Challenge

Face Recognition Prize Challenge (IARPA Challenge run by NIST)

PerfLoc Prize Competition

2017 Reusable Abstractions of Manufacturing Processes (RAMP) Challenge

Federal Impact Assessment Challenge

Nutrient Sensor Action Challenge (EPA challenge supported by NIST)

Reference Data Challenge

Access to Scientific Data and Publications

NIST provides public access to scientific data through data.gov as well as a data portal on NIST’s website. 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 public Github repositories for potential re-use by our stakeholders, including other researchers, and so that our research processes are fully open and transparent.

Spending Information

NIST spending information is available at https://www.nist.gov/about-nist/our-organization/budget-planning 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 analytics.usa.gov, cfdagov, challenge.gov, data.gov, grants.gov, ITdashboard.gov, labs.data.gov/dashboard, usa.gov, USAspending.gov as well as on the NIST website and social media, and in news releases,
publications, and reports. In some cases, NIST information is embedded in Department of Commerce information.

NIST implements the Department of Commerce Public Communications Policy, 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 Public Affairs Office regularly offers communications training to its 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 services 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 Inquiries office strives to answer general NIST inquiries within 24 to 48 hours.

Public Notice

The 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. The directives were updated in December 2016.

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.

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 Annual Report on Technology Transfer. 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.

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 will be used to enhance the Framework in the future. A second draft of the proposed update to the Cybersecurity Framework that discusses further integrates cybersecurity supply chain considerations, identity and access management approaches, and ways for organizations to self-assess cybersecurity risk was released in December 2017.

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 introduces 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.

Continuing the series of public workshops on privacy engineering and risk management and building off the concepts introduced in NISTIR 8062, the PEP also hosted a June 2017 workshop, *Privacy Risk Assessment: A Prerequisite for Privacy Risk Management*. Stakeholders communicated a need for the further integration of privacy into risk management and security guidance, a privacy-specific risk assessment model, and a toolset to manage privacy risk. The PEP is collaborating with other programs within NIST to integrate privacy into existing security guidance and other projects.

**Organization for Scientific Area Committees**

The Organization of Scientific Committees for Forensic Science (OSAC) is an initiative by the National Institute of Standards and Technology (NIST) and the Department of Justice (DOJ) 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 560 members and 260 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. 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 OSAC website, and have recently identified 92 research and development needs.

**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 (NBDF). 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 NBDF will be 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 drafted the general interfaces between the NBDRA components and enhanced Version 1 content (two new volumes added, under review for publication). For Stage 3, the aim is to validate the NBDRA by building Big Data general applications through the general interfaces (under development). All NBDF documents are available at [https://bigdatawg.nist.gov/](https://bigdatawg.nist.gov/).

**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.

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. 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.

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. 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 USC 3710(f) and available online at https://www.nist.gov/tpo/department-commerce.

Collaboration

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 mid-size 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. 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.

In addition, NIST jointly operates research organizations explicitly established to promote the kind of cross-disciplinary collaborations that accelerate research results. NIST 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**

NIST’s Public Safety Communications Research program (PSCR) has worked to drive innovation and advance public safety communication technologies through cutting-edge research and development. PSCR works directly with first responders and other communities to address public safety’s urgent need to access the same broadband communications and state-of-the-art technologies that consumers on commercial networks now expect. 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 established the Innovation Accelerator Program to drive R&D and transform public safety communications capabilities. PSCR relies on its collaboration with public safety practitioners — fire, police, and EMS, industry, academia, and local, state, and federal agencies to guide R&D initiatives. PSCR works to continuously engage these communities and regularly communicate R&D progress and results through outreach events, conferences, and reports.

**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 Monday, November 13, 2017, the First Annual National Cybersecurity Career Awareness Week began with a kick-off event at the National Cybersecurity Center of Excellence. The event featured experts who spoke 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 with a free online cybersecurity career exploration platform.

NICE, Burning Glass Technologies, and the Computing Technology Industry Association have developed an interactive map, CyberSeek. 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 will 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 Center for Risk-Based Community Resilience Planning 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 Center for Statistics and Applications in Forensic Evidence 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 the market because the discovery
and optimization of new materials for innovative products is a time-consuming and 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.

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 the
center of 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.

**Joint Initiative for Metrology in Biology**

JIMB is a joint initiative between Stanford and NIST, providing standards-based research and innovation in biometry. JIMB has established three consortia – Genome in a Bottle, the Synthetic Biology Standards Consortium, and the External RNA Controls Consortium – to bring together partners from government, academia and industry to improve the accuracy, reproducibility, and reliability of

**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.

**National Advanced Spectrum and Communications Test Network**

NASTCN is partnership among National Telecommunications and Information Administration (NTIA), 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, Defense, Commerce, 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 the Manufacturing USA program, 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 fourteen Manufacturing USA institutes is a public-private partnership focusing on a specific, promising advanced manufacturing technology area.

The program advances 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; members include two-thirds of Fortune 50 U.S. manufacturers and eight of the ten top-ranked research and engineering universities.

The AMNPO provides information to the public about the Manufacturing USA program primarily through the website, www.ManufacturingUSA.com. The website includes news about the program, announcements of upcoming events at the fourteen institutes, information about program funding opportunities, an archive of reports and policy papers, and guidance about how to engage with the program. The AMNPO also releases an annual report on the program’s performance and a triennial strategic plan. The AMNPO maintains Twitter and LinkedIn accounts to communicate status updates about Manufacturing USA to the public. Additionally, the AMNPO maintains the Manufacturing.gov 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 does patent and license 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 data.gov 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 at https://www.nist.gov/tpo/reports-and-publications. Technology Transfer partnership activities across Commerce are described in an annual report. A selection of NIST activities with impacts in industry is provided at https://www.nist.gov/industry-impacts.

**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 data.gov 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. Working with private sector and other partners, we intend to identify critically needed improvements to federal technology transfer efforts. 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, and 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 work with U.S. manufacturers to develop new products and adopt new technologies. MEP services can track with the maturity of a technology as well as help strengthen the business side of a company. MEP can play a pivotal role in helping manufacturers move from concept to market through services in areas such as product design, manufacture 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.

**NIST Open Government Initiatives**

The table below shows a list of initiatives for NIST.
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<td>Return on Investment (ROI) Initiative</td>
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**Project – Return on Investment (ROI) Initiative**

Following a Request for Information (RFI) published in the Federal Register and three public forums, a white paper will be published that summarizes public comments and recommendations.

**Project – Improve Website Information Related to Public Access**

NIST has a /open page on the NIST website, with content that was initially prescribed by OSTP. The page currently contains documents related to our plans for providing public access to results of our research. We are updating that page to provide visitors with information on how to access the various research products that we provide: narrative publications, public data, and software.

**Project – Modernization of Standard Reference Data**

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.

**Project – Make Directives of Public Interest Available on NIST’s Website**
Directives that may be of public interest must be disclosed proactively under the Freedom of Information Act. Currently, only the NIST policy and order for providing public access to results of federally funded research are publicly available. NIST operations were previously coordinated through an Administrative Manual, and subchapters are currently being migrated to a directives system. As that work progresses, we will begin making directives available to the public on the NIST website as appropriate.
National Oceanic and Atmospheric Administration (NOAA)

NOAA is an agency that enriches life through science. NOAA’s reach goes from the surface of the sun to the depths of the ocean floor, working to keep citizens informed of the changing environment around them.

NOAA’s roots date back to 1807, when the Nation’s first scientific agency, the Survey of the Coast, was established. Since then, NOAA has evolved to meet the needs of a changing country. NOAA maintains a presence in every state and has emerged as an international leader on scientific and environmental matters. Its mission touches the lives of every American and has a critical role in protecting life and property and conserving and protecting natural 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.

NOAA’s passionate and dedicated scientists use cutting-edge research, high-tech instrumentation and a modern IT infrastructure to provide citizens, planners, emergency managers and other decision makers with reliable information they need when they need it.

Open Data

NOAA has a long-standing formal policy (which pre-dates OMB M-13-13) requiring NOAA’s environmental data to be managed based upon an end-to-end data lifecycle, and to be “visible, accessible and independently understandable to users”. In support of this policy, NOAA has an active Environmental Data Management Committee (EDMC), comprising members from all Line Offices to facilitate and guide the myriad NOAA data producers and data stewards toward effective implementation of the policy. In turn, this effort significantly advances and enables the Open Data agenda for NOAA’s environmental information. In addition, we have established a policy requiring extramural funding recipients to make their environmental observations publicly accessible in a timely fashion.

On an annual basis, NOAA hosts an Environmental Data Management Workshop to promote awareness, discussion, and problem-solving of NOAA data management activities including data
discovery, access services, metadata, usage, citation, "big data" issues, and other relevant topics. The most recent workshop was held in April 2018, with a theme of "Improving Discovery, Access, Usability, and Archiving of NOAA Data for Societal Benefit." The workshop was attended by more than 200 registered participants, and built on past work by providing training, highlighting progress, identifying issues, fostering discussions, and determining where new technologies can be applied for management of environmental data and information at NOAA.

Additionally, the National Marine Fisheries Service (NMFS) has recently indicated they intend to proactively disclose the entire Marine Mammal Inventory Report. This report contains listings of the Marine Mammals held in captivity throughout the country, and is a vital data set regularly sought through the FOIA. This proactive disclosure increases NOAA’s transparency, and allows the public access to a data set that is of significant public interest. NMFS is currently undergoing a review of the technical requirements for making this data publicly available.

Access to Scientific Data and Publications

In 2018, NOAA created a database of [NOAA Authored Peer-Reviewed Publications](https://www.noaa.gov) containing over 3,000 articles published by NOAA scientists in scientific journals. This database allows the public to more easily answer questions such as:

- **What topics are being researched at NOAA?** Since 2011, NOAA scientists authored or co-authored articles spanning 144 research areas aligned with the agency’s mission objectives including: meteorology and atmospheric sciences; geosciences; oceanography; fisheries; marine and freshwater biology; ecology; and geosciences.

- **Who is doing the research?** Within NOAA, most line offices conduct research and issue scientific publications, with the Office of Oceanic and Atmospheric Research (OAR) and NMFS comprising the majority. Our top five extramural collaborators are the University of Colorado System, University of Colorado Boulder, NASA, the University of California System, and the University of Washington. On the international level, many of our collaborations occur with Canada, Australia, France, the United Kingdom, and Germany.

- **How is NOAA’s research being used to benefit the American people?** Much of NOAA's research forms the basis for generating mathematical models that are used to forecast a wide variety of events such as severe weather (like hurricanes, tornadoes, flooding), tsunami, air quality, daily tides, sea level rise, fish stock recovery, threatened and endangered species status, harmful algal blooms, and ship movements into ports.

With easily accessible information and answers to questions like these, we can foster a more collaborative, efficient, and effective NOAA research agenda.
**Privacy**

On March 28, 2017, the NOAA CIO signed the [NOAA Unmanned Aircraft Systems (UAS) Privacy Policy](https://www.noaa.gov), the first of its kind within the Department. The policy was approved in compliance with the February 15, 2015 Presidential Memorandum requiring agencies utilizing UAS technology to craft policies to protect the privacy and civil liberties of the individuals whose personally identifiable information (PII) may be collected during UAS operations.

In addition to the UAS Privacy Policy, NOAA submitted a draft System of Records Notice (SORN) to the Department for review prior to publication in the Federal Register. The SORN outlines for public notice the collections, authorities, intended use, sharing, and other aspects of PII that may be collected during UAS operations. Following submission to the Department, DOC determined the SORN could be leveraged for broad-ranging activities in other Bureaus within DOC, and the SORN was revised to a Department-wide SORN which was submitted pursuant to the new expedited review procedures of OMB A-130, and has been published in the Federal Register. This will allow UAS activities over populated areas in disaster recovery efforts as well as storm damage assessment and other operational needs in the furtherance of NOAA’s missions to protect life and safety.

Today, for all NOAA FISMA systems, the compliance for Privacy Threshold Analysis (PTA) completion is at 100%, approximately 25% higher than at the start of the compliance effort push at the beginning of FY16. The Privacy Impact Assessment (PIA) completion rate is at 95%, which is approximately 50% higher than at the start of the compliance effort.

NOAA also implemented its Data Loss Prevention solution, providing an active filter to prevent the unencrypted transmission of Sensitive PII via email. This solution has prevented hundreds of transmissions of Sensitive PII, forms with Social Security fields, as well as open text transmissions of material prohibited from unencrypted transmission under the DOC Electronic Transmission of PII Policy. This effort has significantly decreased Privacy Incidents, and will improve our posture for protecting the PII entrusted to NOAA in carrying out its mission

**Freedom of Information Act (FOIA) Requests**

NOAA’s FOIA backlog is currently at 91 requests, which is a 56% decrease since its peak in 2014. NOAA has continually reduced its backlog, creating a steady state of processing that can more readily address requests as they come in, without allowing the burgeoning backlog that leads to costly litigation. NOAA’s litigation cases have significantly shifted, now focusing on public policy issues and exemption applicability, rather than NOAA’s inability or failure to respond, with several litigations dismissed without briefings or attorney’s fees.

NOAA has issued guidance on litigation procedures to ensure proper case handling at the Staff and Line Office Level. NOAA’s FOIA program staff have also personally visited numerous...
offices, including regional offices, to provide in-person training and best practices, distributed
guidance to all FOIA Liaisons, and has held FOIA Legal Expert Calls to address deficiencies, case
law, and challenges in the evolving landscape of FOIA processing.

NOAA’s FOIA program also instituted regular FOIA training for all new employees at the Silver
Spring MD campus, so that incoming employees are aware of their FOIA responsibilities, and are
ready to respond to requests in their respective areas of expertise.

Websites

The 2017 Atlantic Hurricane Season was one for the record books, and NOAA’s preparation and
response was nothing less. NOAA’s collective attention to Hurricanes Harvey, Irma, and Maria
spanned multiple mission areas and resulted in a record number of site visitors.

NOAA moved several sites including NOAA.gov and Hurricanes.gov to the NOAA Web
Operations Center which utilized a commercial cloud-based content delivery network (CDN) to
seamlessly handle the record high traffic and ensure access to critical weather information in
advance of, at landfall and following the storms. Some impressive web analytics included:

Hurricane season 2017

- From September 6 through 11, 2017, the period just before and at landfall for Hurricane
  Irma, Hurricanes.gov received 12.9 billion hits to the infrastructure and the NOAA.gov
  homepage logged nearly 6 million unique visitors.
- Online demand for the National Geodetic Survey emergency response aerial imagery
  associated with hurricanes Harvey, Irma and Maria exceeded 1.7 billion requests. More
  than 65,000 images were collected via the Office of Marine and Aviation Operations
  aircraft which surveyed more than 23,000 square kilometers from 195 flight hours.

Satellite imagery demand

- NOAA’s National Environmental Satellite Data and Information Service (NESDIS)
  launched the GOES-East Imagery website in December 2017 and by March 23, 2018,
  had logged its 10 millionth page view.
- NESDIS’s GOES-East imagery site services all the views and channels from the GOES-
  East satellite. Highlights from this site’s images and animations are widely shared on
  social media and appear prominently in news coverage of weather events. It provides
  satellite images which are viewed millions of times per day through National Weather
  Service sites as well.
NOAA Open Government Initiatives

The table below shows a list of initiatives for *NOAA*.

Table 9 - NOAA Initiatives

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<th>Status</th>
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<td>NOAA OneStop Data Discovery and Access Framework</td>
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<td>Empowering the Public to Contribute to NOAA’s Mission through Citizen Science</td>
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<td>Integrated Severe Weather Data via GIS Map Interface</td>
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<td>Data Visualization Capabilities for Global Summary Data</td>
<td>Live / Operational</td>
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<td>NOAA Wireless Emergency Alerts (WEA) and Common Alerting Protocol (CAP)</td>
<td>Live / Operational</td>
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**Initiative:** Big Data Project (Flagship project)

The *Big Data Project* (BDP) is exploring the feasibility of using public-private partnerships to publish NOAA’s vast open data resources, and increase their use by incorporating them into high performance computing, analytic, and storage services provided by the private sector. This collaboration combines NOAA’s tremendous volume of high quality environmental data with 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 has the potential to create new economic and job opportunities without using additional tax dollars.
These partnerships were created through Cooperative Research and Development Agreements (CRADAs) with Amazon Web Services, Google Cloud Platform, Microsoft, IBM, and the Open Commons Consortium. Those CRADA collaborators provide NOAA’s original open data at no net cost to anyone that wants them, and join with interested private 3’rd parties and leverage their cloud computing capabilities to develop "big data" value-added products and service which they may monetize. Additionally, the CRADA allows NOAA to recover related data delivery costs, which could enable the BDP to operate at no net cost to the taxpayer.

Early results have indicated that the CRADA model is effective for several of NOAA datasets. Over one year, Amazon Web Services’ 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 Amazon to generate revenue to support this service. AWS has begun hosting of NOAA’s newest satellite data as well, with availability of data from the GOES-16 satellite beginning in July 2017. As of March 2018, these GOES-16 data are being accessed over 1.5 million times per day.

Google’s hosting of NOAA’s Global Historical Climate Network and Global Surface Summary of the Day datasets within Google’s BigQuery tool has produced over 1,200,000 GB of data usage in just 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.

NOAA is continuing to publish over 38 additional datasets through the Big Data Collaborators, such as its National Water Model output and satellite imagery available from the Open Commons Consortium, with many other data sets under discussion, including coastal water level, genomics, and fisheries catch data. The response of the data market and industry to these new opportunities is being evaluated. The Climate Corporation, a company that examines weather data to provide insurance to farmers, was the first large-scale user of NEXRAD data on Amazon Web Services. In a presentation at the National Weather Service (NWS) Partners meeting in 2017, The Climate Corporation showcased the benefits of having the entire data set available in the cloud, including a reduced time-to-market for their weather-based products and increased accuracy of their weather predictions. Similar advantages and commercial opportunities are anticipated to be created for others by the availability of NOAA data through the Big Data collaborators’ platforms.

**Initiative:** NOAA OneStop Data Discovery and Access Framework (new initiative for 2018)
OneStop provides improved public discovery and access for NOAA data. The initial capability released in December 2017 supports users in finding and accessing over 26,000 archived data collections at NOAA. Eventually, OneStop will replace 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 and includes datasets that have been cloud-enabled by the NOAA Big Data Project. 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. With support from NESDIS, NOAA OneStop was developed and implemented by the NOAA National Centers for Environmental Information (NCEI).

**Initiative: NOAAGov**

The noaa.gov website serves as the primary public face of the NOAA organization. The site logs nearly 100 million visits annually and is consistently one of the top accessed Federal Websites. The site provides access to NOAA’s most requested mission-related information through focus area pages, news and features from across NOAA, highlights primary mission areas and updating the technology; and providing a framework for consolidation and integration of NOAA corporate information and resources into the new site organization and presentation. During the 2017 hurricane season, NOAA.gov provided a critical gateway to NOAA’s storm related resources including forecasts & warnings.

NOAA continues to review the overall user experience for the general public and key audiences by addressing the appeal, user friendliness, navigation, information accessibility, search capabilities and usability of the site. Additionally, the NOAA.gov site makes important linkages to information and resources from across the enterprise, connecting visitors to and allowing content to flow more organically from NOAA’s line organizations.

The responsive design provides easy and clear navigation and viewing of the site across all platforms and screen sizes. In 2017, the innovative NOAA.gov site was one of 5 sites nominated for the prestigious international Webby Award in the category of Government and Civil Innovation. In FY 2018, NOAA.gov continues to expand on the core site to integrate NOAA’s
program content and ensure connections across NOAA’s Web landscape. A new corporate style for NOAA’s Web presence is continuing to spread across sites providing a unified presentation. This cohesive style helps visitors navigate NOAA’s vast information, promotes understanding and use of NOAA products and services, while guiding visitors to the data and information they seek - where and when they need it most.

**Initiative:** 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 monitor 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 [NOAA Citizen Science Community of Practice](https://www.noaa.gov/), which has grown to include over 175 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](https://www.crowdsource.gov/). Through a seat on the Steering Committee, NOAA has been able to guide the rapid growth of this community, which was named a finalist for the 2017 Roy and Lila Ash Award for Public Engagement in Government by the Ash Center for Democratic Governance and Innovation at the John F. Kennedy School of Government, Harvard University. NOAA contributes significantly to [citizenscience.gov](https://www.citizenscience.gov), a government-wide hub for information on the field. There are 45 NOAA projects in the site’s catalog, 3 case studies on NOAA projects in its Toolkit, and 11 posts on NOAA projects in its blog. NOAA worked with its partner agencies to analyze impacts of the [Crowdsourcing and Citizen Science Act](https://www.ncei.noaa.gov/), signed into law in January 2017.

At a field-wide level, NOAA helped sponsor the [Second Conference of the Citizen Science Association](https://www.citizen-science.org/). The Agency was represented at the Conference with 13 presentations and posters highlighting NOAA efforts. Stories of NOAA citizen science projects are also being told through *[The Crowd & the Cloud](https://www.noaa.gov/)*, a four-part public television series reaching 80% of U.S. households. *[Steller Watch](https://www.noaa.gov/)*, a project that has volunteers classify images of Steller Sea Lions, has received over 450,000 classifications and media attention since it was launched in March of 2017.

**Initiative:** 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 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.

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 we 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 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. We check the quality of the magnetic data from all users and make 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.

Initiative: Crowdsourced Bathymetry

Both the Moon and Mars have been more comprehensively mapped than the world’s seas and oceans. Contrary to popular belief, less than 15% of the depth of the world’s ocean waters have been measured directly and only ~50% of the worlds coastal waters (waters < 200m deep) have ever been surveyed. Bathymetry (a knowledge of the depth and shape of the seafloor) underpins
the safe, sustainable, cost effective execution of almost every human activity that takes place at sea, yet most of the seafloor remains virtually unmapped, unobserved, and unexplored.

Since 2014, the International Hydrographic Organization (IHO) has been encouraging innovative supplementary data gathering and data maximizing initiatives to increase mankind’s knowledge of the bathymetry of the seas, oceans and coastal waters including crowdsourced bathymetry (CSB). CSB can be used to identify areas where nautical charts are inadequate and proper hydrographic surveys are needed or can be applied to nautical charts when the source and uncertainties of the data are well understood. The key to successful CSB efforts are volunteer observers who operate vessels-of-opportunity in places where charts are poor or where the seafloor is changeable and hydrographic assets are not easily available.

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 has been working over the last few years to enhance the infrastructure and interface of the DCDB to provide archiving, discovery, display and retrieval of global crowdsourced bathymetry data contributed from mariners around the world.

NOAA and the National Geospatial-Intelligence Agency (NGA) are active participants in the IHO Crowdsourced Bathymetry Working Group and along with other international scientific and hydrographic experts, have been working to draft a guidance and standards document to empower mariners to map the gaps in the world’s bathymetric coverage and to contribute their data to the DCDB. The working group is also discussing ways to encourage all vessels engaged at sea, that are equipped with appropriate technology, 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.

A draft of the IHO guidelines on crowdsourced bathymetry has been distributed for public comment and is available at the IHO website. This document will provide 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. This document is expected to become an IHO publication (IHO Publication B-12 – IHO Guidance on Crowdsourced Bathymetry) in early 2019.
**Initiative:** Climate.gov Portal

NOAA [Climate.gov](https://climate.gov) 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. In 2017, NOAA Climate.gov received over 8.3 million visits, which was a 19% increase over 2016. In 2018, so far, the site is exceeding last year’s visit rate by about 13% (the target is 10%). Traffic on our social media channels has also increased substantially — Facebook followers up 25%, Twitter followers up 43%, and Instagram followers up 141% over the last year. Additionally, Climate.gov scored a 76 in a customer satisfaction survey (government average is 73, on a scale of 1-100).

The site offers three 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.

In ‘Maps & Data’, Climate.gov has added new temperature projection maps for the U.S., in two different scenarios, for every month of the year out to 2100. The portal also launched a new educator engagement initiative to promote awareness and use of the high-quality resources offered in ‘Teaching Climate’, and has seen an 82% growth in visits to that section over the last year. Climate.gov also upgraded the ‘Climate Explorer’, a web-based mapping and graphing tool that provides county-scale climate projections for a range of variables used by decision makers (e.g., temperature, precipitation, and heating-/cooling-degree days). Users also now have the ability to monitor when and how often thresholds have been exceeded (e.g. days above or below a temperature or precipitation value) that may impact their valued assets. The Climate Explorer was nominated for a 2017 Webby Award—the web’s highest honor—in the “Best Visual Design – Function” category.

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 ([https://toolkit.climate.gov](https://toolkit.climate.gov)). The Toolkit is an interagency partnership operating under the auspices of the U.S. Global Change Research Program. Its primary target audience is applied professionals—including city planners, resource managers, policy leaders, facility managers, analysts and consultants—who oversee or help guide development and implementation of climate adaptation plans. Public demand for the Toolkit’s contents has been growing rapidly. In 2017, the site received about 1.2 million visits, which is a 73% increase over
2016. In 2018, so far, the Toolkit is exceeding last year’s visit rate by more than 17% (the target is 10%).

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

(1) make and implement climate adaptation plans;
(2) explore how climate conditions are changing in their location and understand how their valued assets are, or may be, exposed to climate-related hazards;
(3) 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 130 real-world case studies showing people taking adaptation actions all across the nation;
- A compendium of over 360 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 28 locations around the U.S.);
- Ten different Topic sections with summary narratives excerpted from the 3rd National Climate Assessment (NCA3) and other authoritative sources;
- Three Regional 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.

**Initiative:** 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 website or organization, so this provides a permanent ID.

As part of its Open Government activities, NOAA is continuing to assign DOIs to datasets archived in its National Centers for Environmental Information (NCEI). The NOAA Central Library is also issuing DOIs for technical reports archived there. The NOAA Environmental Data Management Committee (EDMC) has issued a Data Citation Procedural Directive with guidelines for citing datasets with DOIs and requirements for obtaining a NOAA DOI. The fundamental requirement is that the data be archived at NCEI.

The NOAA DOI project has several benefits:

- It allows users to cite data unambiguously;
- It enables NOAA to track such citations in the literature;
- It encourages submission of data to the archives;
- It supports the linkage of publications and data called for in the White House Office of Science and Technology Policy (OSTP) memorandum Increasing Access to the Results of Federally Funded Scientific Research; and
- It enables data producers to get credit for data they have properly documented and managed for long-term preservation.

NOAA will report at least quarterly the number of new DOIs assigned to datasets and technical reports (1,879 as of March 8, 2018) and any future metrics or milestones in this initiative.

**Initiative:** Local Climatological Data (LCD)

NCEI has relaunched one of its most popular datasets, providing updated and improved local climate summaries from several thousand locations. [Local Climatological Data](https://www.ncdc.noaa.gov/oa/climate/lanes) help users generate reports (known as LCDs) that summarize climate conditions for more than 2,500 weather stations and airports. Prior to the update, reporting stations numbered fewer than 1,000. With the update, stations total 2,513. LCDs are used widely across sectors from construction and transportation to courts and law offices.

NCEI released the new dynamically generated LCD product through the [Climate Data Online Data Tools web page](https://www.climate.gov/tools-and-data). The newer version of the LCD merges the unedited, edited, and quality-controlled
local data available through a revamped interface. Additionally, the new LCD contains many 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. Prior to the update, reporting stations numbered fewer than 1,000. With the update, stations total 2,513.

NCEI implemented the upgrade for several reasons, primarily to provide faster access and improve the content of the data. Many users of LCDs require certification that indicates the record’s authentication for particular uses, such as in a court of law. As with the previous LCD, the relaunch maintains certification capability.

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. 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
- 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 updated 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 new tool also provides access to NCEI station history information and equipment details.

**Initiative:** 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 interface.

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, 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: https://www.ncdc.noaa.gov/swdi/csv.html

Storm Events Database:

- Web Access and Services: https://www.ncdc.noaa.gov/stormevents/
- Bulk Download: https://www.ncdc.noaa.gov/stormevents/ftp.jsp

Initiative: Data Visualization Capabilities for Global Summary Data

As a dynamic mapping application for Global Summary Data from NOAA’s National Center for Environmental Information (NCEI), US Climate Indices displays colorized maps for temperature, 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.

Summarized climate conditions are now 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. The dataset used is the Global Historical Climate Network (GHCN)-Daily, comprised of daily summary data (e.g., maximum / minimum temperature, precipitation, snowfall) for global locations.

**Initiative:** NOAA Wireless Emergency Alerts (WEA) and Common Alerting Protocol (CAP)

Wireless Emergency Alerts (WEA) are 90-character 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. NWS activates WEA for Tsunami, Tornado, Flash Flood, Hurricane/Typhoon, and Dust Storm Warnings. NWS also activates WEA for Storm Surge, Extreme Wind, and Snow Squall Warnings. NWS activation of WEA has been credited with saving hundreds of lives, particularly during tornadoes.

WEA is a partnership between public safety officials, FEMA, the 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.

On January 31, 2018, the FCC adopted a rule which will significantly improve WEA geographical targeting. The new rule requires participating wireless carriers to deliver WEA messages to an area that matches the warning polygon with no more than 0.1 of a mile overshoot. The deadline for the rollout is November 2019. [Click here](#) for more information.

On September 2016, the FCC adopted additional rules which go into effect in 2019. This includes increasing the maximum WEA message length to 360 characters, support for Spanish language alerts if provided by the alert originator, and more. [Click here](#) for more information.
The 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. NWS CAP messages which warrant WEA activation are specially marked so that IPAWS only passes those alerts to commercial wireless carriers. See https://www.weather.gov/wrn/wea for more information about NWS activation of WEA.

CAP is based on Extensible Markup Language (XML) and is an industry standard for the exchange of emergency alert information. FEMA officially adopted CAP for IPAWS in 2010. NWS CAP messages are publicly available over a variety of NWS dissemination channels as well as FEMA IPAWS. See http://alerts.weather.gov for more information about NWS produced CAP.

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.
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. NTIA is making Census Current Population Survey Internet use data available in the Data Central section of its website, and has developed an interactive tool to help site visitors find time series data quickly. This information informs efforts to increase broadband access and adoption, thereby supporting economic growth. Other initiatives include updates to the federal spectrum compendium, and ongoing multistakeholder policy processes.

Open Data

NTIA publishes datasets and APIs at data.gov and on its websites. The Data Central section of NTIA’s website, www.ntia.doc.gov/category/data-central, is home to data and analysis on computer and Internet use in the United States. In addition to the APIs at data.gov and broadbandmap.gov, all of the National Broadband Map datasets from June 2010 through June 2014 are posted at www2.ntia.doc.gov/broadband-data. Data on Federal frequency assignments in the 225 to 6000 MHz bands by agency, band, and radio service are posted at data.gov and https://www.ntia.doc.gov/other-publication/2017/federal-government-spectrum-compendium.

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 FOIA requests.
Privacy

NTIA OCIO prepares compliance reports such as those required under the FISMA. The NTIA follows departmental guidance from the Office of Privacy and Open Government. The Office of Policy Coordination and Management (OPCM) requires IT security awareness training that covers Personally Identifiable Information to new employees during in-processing, as well as annual computer based training. A list of available Privacy Impact Assessments is posted at https://www.ntia.doc.gov/page/ntia-privacy-impact-assessments.

Whistleblower Protection

NTIA follows departmental guidance from the Office of Inspector General. 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 main website is www.ntia.doc.gov; information on grant programs and the BroadbandUSA initiative is at www2.ntia.doc.gov; telecommunications research and engineering services and technical reports at NTIA’s Institute for Telecommunication Sciences are featured at www.its.bldrdoc.gov; 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 www.firstnet.gov.

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 its research and engineering laboratory, ITS supports NTIA 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 recognized and effective. 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.

Transparency

NTIA publishes on its websites extensive information throughout 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, as are all multistakeholder process meetings.

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 www.ntia.doc.gov and www.firstnet.gov. All comments in public comment proceedings are also posted. Numerous listservs provide announcements of events and activities. NTIA provides links to Twitter, Facebook, YouTube, and LinkedIn accounts, as well as RSS feeds, to publicize its publications and activities.

Records Management

NTIA is in the process of moving from paper to electronic records management in accordance with NARA guidelines.

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 Department’s FOIA Online system. NTIA uses FOIA Online as one method for receiving FOIA requests and for tracking requests. A webpage of instructions on filing a FOIA request as well as contact information is at www.ntia.doc.gov/page/2011/foia-information.

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 www.ntia.doc.gov and www.firstnet.gov. All comments in public comment proceedings are posted. Many public meetings are webcast and opportunities to participate by teleconference are provided. NTIA provides links to Twitter, Facebook, YouTube, and LinkedIn accounts, as well as RSS feeds, to publicize opportunities for participation and collaboration.
NTIA’s Institute for Telecommunication Sciences hosts the 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>
<thead>
<tr>
<th>Operating Unit</th>
<th>Project</th>
<th>Status</th>
<th>Estimated Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTIA</td>
<td>Creating a National Broadband Map</td>
<td>Completed, March 2015</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Establishing Online Access to Results of Broadband Survey</td>
<td>Live / Operational</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Publishing Federal Spectrum Transition Plans</td>
<td>Live / Operational</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Creating a Federal Spectrum Compendium</td>
<td>Live / Operational</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Multistakeholder Privacy Policy Process</td>
<td>Ongoing</td>
<td></td>
</tr>
<tr>
<td>BroadbandUSA</td>
<td></td>
<td>Ongoing</td>
<td></td>
</tr>
</tbody>
</table>

**Project – BroadbandUSA**

BroadbandUSA promotes innovation and economic growth by supporting efforts to expand broadband access and meaningful use across America. BroadbandUSA serves state and local governments, industry and nonprofits that want to expand broadband infrastructure and promote digital inclusion. BroadbandUSA’s services are driven by the needs and interests of state and local broadband leaders, and focus on supporting planning efforts, helping to identify funding, and implementing local broadband programs.

BroadbandUSA also holds regional workshops that bring local stakeholders together and provides solution-neutral guides and tools. These efforts equip state and local leaders with information to make key decisions, guidance on how to use broadband to meet their community’s needs, and connections to federal, state and industry stakeholders to advance
their overarching goals such as economic development, job creation, educational outcomes, improved agriculture, healthcare delivery and public safety.

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, and July 2015. 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, www.ntia.doc.gov/category/data-central, 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.

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, but 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 FY 2016.

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 multi-stakeholder 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. And finally, NTIA began a multistakeholder process in September 2016 on fostering the advancement of the Internet of things.
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 21st 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>
<thead>
<tr>
<th>Operating Unit</th>
<th>Project</th>
<th>Status</th>
<th>Estimated Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTIS</td>
<td>National Technical Reports Library (NTRL)</td>
<td>Addition of born digital documents received</td>
<td>Ongoing</td>
</tr>
<tr>
<td></td>
<td>• Online access to an electronic library of over 3 million bibliographic records (dating from 1964)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Links to over 960,000 corresponding full-text reports</td>
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<tr>
<td></td>
<td>• Coverage from the late 1890’s to present (most reports date from the 1970’s to present.)</td>
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<tr>
<td></td>
<td>• Launched Open NTRL on October 1, 2016. Open NTRL is freely available worldwide and includes the following advanced search capabilities:</td>
<td></td>
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<tr>
<td></td>
<td>o Search by title words</td>
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<tr>
<td></td>
<td>o Search by source agency</td>
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<td></td>
<td>o Search by author</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>o Search limited by year of publication</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>o Search limited to documents available in full text</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>o Search results providing access to all available full text reports in digital format.</td>
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</tr>
<tr>
<td></td>
<td>Data Science Platforms</td>
<td>Onboard</td>
<td>October 2016</td>
</tr>
<tr>
<td></td>
<td>• Support federal government collection and use of enormous amounts data about everything from weather and climate to statistics on the U.S. economy, population and demographics to trade statistics by market and industry, including jobs supported by exports</td>
<td>Onboard</td>
<td>October 2017</td>
</tr>
<tr>
<td></td>
<td>o Select merit-based Joint Venture Partners (JVP)</td>
<td>Project Evaluation; Selections</td>
<td>Ongoing</td>
</tr>
<tr>
<td></td>
<td>o Establish team of Data Scientist and Chief Data Officer</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>o NTIS receives a request from a federal agency for innovative data services</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>o Conduct a merit-based competition among NTIS interested JVPs.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Annual Federal Data Summits</td>
<td>Completed</td>
<td>April 2017</td>
</tr>
<tr>
<td></td>
<td>o Federal Data Meeting</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>o Data Innovation Day</td>
<td>Completed</td>
<td>March 2018</td>
</tr>
</tbody>
</table>
Project – National Technical Reports Library (NTRL)

The National Technical Reports Library (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 960,000 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 (ATPA), and the results are available to the public in perpetuity.

Project – Data Science Platforms

The U.S. Commerce Department's National Technical Information Service (NTIS) has established partnerships with 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 federal government collects an enormous amount of useful data about everything from weather and climate to statistics on the U.S. economy, population and demographics to trade statistics by market and industry, 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. “We want 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,” said NTIS Director Avi Bender.
Office of the Inspector General (OIG)

Office of Inspector General’s (OIG) seeks to improve the efficiency and effectiveness of the Department’s programs and operations. The OIG also endeavors to detect and deter waste, fraud, and abuse.

The OIG Open Government operations and plan contributes to the Departmental Open Government plan by ensuring that the principles of transparency, collaboration and participation are built into our policies and operations. In order to ensure that these principles are supported routinely throughout OIG, certain programmatic functions are dedicated with Open Government commitments and responsibilities. These programmatic functions include positions such as the OIG Records Officer, the OIG FOIA Officer, and positions within the OCIO.

One of the ways the OIG supports the principle of transparency is to routinely update the Webmaster posts with cleared and finalized OIG information to the website. To ensure that the OIG operations support the principles of collaboration and participation, we periodically review our website to ensure that all reports and audits are easily accessible. In FY 2013, the OIG’s Public Affairs Specialist led an effort to update the OIG’s website, resulting in improved public access to agency material and general navigation of the website. Recently, we also joined other the Department’s bureaus in using FOIAonline to process OIG FOIA requests. This action resulted in improved tracking of OIG requests, improved coordination with Departmental FOIA Officers, and improved information sharing with requesters.

The OIG is also supporting Open Government activities by improving the Records Management policies and processes to manage records and by reviewing OIG’s records management schedules for accuracy. The OIG Records Officer conducts annual training for staff and maintains an internal website to increase awareness. This supports meeting one of the goals within M-12-18 “Managing Government Records Directive,” which was to provide annual records management training to employees by December 31, 2014. Furthermore, in December 2014, OIG posted a “Request for Information” (RFI) to FedBizOpps in order to gain information on electronic records processes for email records.
The OIG plans for Open Government activities are highlighted in both the chart and the paragraphs below. To provide more insight into our other Open Government activities and plans, we are providing more details in the paragraphs following the chart below.

Open Data

The OIG is complying with the Open Data Memorandum (OMB M-13-13) by developing and maintaining an “enterprise data inventory” of the OIG publically available data resources. This is our flagship initiative that supports the departmental plan and Open Government objectives established by the administration. As time permits, we are also actively categorizing and inventorying our internal digital assets. The categorization of our internal digital assets includes a review of the OIG Records Retention Schedules to ensure that the information is maintained in accordance with NARA policy. The following paragraphs demonstrate some other ways we are supporting the Departmental Open Government plan.

Privacy

The OIG OCIO continues to prepare compliance reports such as those required under the FISMA. The OCIO actively participates in reviews of the Departmental Privacy Controls implementation approach in conjunction with the NIST. We continue 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 is also improving security by implementing the administration’s priority cybersecurity capabilities. These actions will assist in the protection of the personal information we maintain 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 PIA to ensure compliance with departmental requirements. The PIA is also reviewed when a new information system is being designed for implementation on the network. In FY 2014, we completed an amendment to our existing SORN covering investigative records.

Whistleblower Protection

In accordance with 5 U.S.C. § 2302(c), OIG informs employees of their rights and remedies under the prohibited personal 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, OIG’s Whistleblower Protection Ombudsman, on 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 Ombudsman. The Ombudsman’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 Ombudsman provides brown bags training sessions, posts informational posters at agency facilities, and develops brochures for employees as part of the orientation process.

Websites

The OIG’s website is accessible by a link at the bottom of the Department home page and directly at www.oig.doc.gov. The website includes a menu at the top of the page, allowing visitors to access various topics of interest. The website provides access to downloadable PDFs of public audit and investigative reports, audits initiated, correspondence, and Congressional testimony. Information is organized by title, date, and the Department’s bureau. The website also includes a FOIA reading room, as well as information on how to make a request. The “Contact Us” page provides information for the webmaster and includes links to the FOIA Officer contact. 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

To ensure transparency, one of OIG’s goals highlighted in the chart following the OIG Open Government Plan introduction is to publish an inventory of external data assets on Data.gov this FY. Recently, the OIG Office of Administration (OA) completed this inclusion of the OIG inventory of external data assets within Data.gov. The concept of transparency is established in OIG routine processes and policy. The OIG has a formal clearance process that ensures active endorsing the administration’s Open Government objectives. OIG routinely practices proactive disclosures by including a plan to issue two public investigative reports as part of the strategic goals for FY 2015. The OIG also publishes a Semi-annual report twice yearly and the “Top Management Challenges” report annually.

The OIG supports transparency of events concerning the office by sending tweets using OIG’s official Twitter account and by posting comments to its Facebook page. The OIG also participates in transparency by utilizing FOIAonline, a government partnership that provides shared services for FOIA processing. To learn how the OIG FOIA office provides public access to frequently released documents, we have included a paragraph with information on our reading room in this plan.

Public Notice

As stated previously, OIG uses a Twitter account and Facebook page to publicize publications, 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 followers to the posted tweets and Facebook posts expands. The OIG will continue to use these communication methods to inform the public.
The OIG website at www.oig.doc.gov is also used to provide the public notice of recently released reports and audits. The “Recent Releases” section on the OIG Home page provides the public links to these reports, audits and other correspondence. Furthermore, the OA posted a request for information to FedBizOpps in December 2014 to pursue the goal of gaining information on records management of email. More details on this initiative are below in the section on Records Management.

Records Management

The second flagship initiative is to improve records management processes by revising records management policies and OIG disposition processes. As part of this initiative, OIG posted a request for information (RFI) on FedBizOpps in FY 2015 to obtain information on records management for e-mail records in the cloud. This RFI was drafted in support of the “Managing Government Records Directive” (M-12-18, jointly issued by OMB and NARA) to meet the goal of managing all e-mail records in electronic format by December 2016. By improving the management of e-mail records and by examining the records management policies, we will improve customer service, meet one of the goals of the Presidential Records Directive, and serve the objectives of Open Government. The OIG will be continuing to improve records management policies as mentioned in the chart earlier in this document.

The OIG Records Manager routinely participates in the FRON. This activity supports the Open Government activity of collaboration. Providing records management training to OIG employees enables OIG to meet one of the goals of M-12-18, by implementing annual records management training to all employees by December 2014. As part of this action, the OIG is hiring a Records Management Specialist to coordinate with other records managers within the FRON and NARA to collaborate on an online records management course developed for Federal employees.

Freedom of Information Act (FOIA) Requests

Within the last two years, OIG moved primarily to electronic-based systems that has greatly improved the efficiency and responsiveness of its FOIA process. All FOIA requests are tracked in the FOIAonline system. The OIG also improved its FOIA processes by developing a more robust external FOIA reading room containing frequently requested items (serving the Open Government objective of proactive disclosure) and by revising the FOIA external website to list the exemptions to the Act. In this way, OIG is communicating with the public to provide information on the FOIA program and encouraging transparency, collaboration, and participation. FOIA responses are sent by e-mail directly to requesters in order to remain proactively engaged. The OIG website provides more information on the OIG FOIA program at http://www.oig.doc.gov/pages/Freedom-of-Information-Act.aspx.
Proactive Disclosures

Previously mentioned, upcoming events and activities are posted OIG’s Twitter account and Facebook page to alert customers. Posting the Tweets and the Facebook comments notifies the public of weekly activities and alerts them to job announcements within OIG. OIG also notifies the public of additions to the external website by posting notice of audits initiated and recent releases in these sections on the OIG home page. The OIG will continue to review its website to improve customer communications. The OIG FOIA Officer also routinely reviews FOIA requests to identify types of frequently requested records and other records of interest for proactive posting.

Congressional Requests

The OIG has a formal process for reviewing, releasing and responding to Congressional requests. First, employees who act for the requesting official complete a clearance form requesting Office of Counsel (OC) review. The OC assesses the suitability of public release under the provisions of the Freedom of Information Act (FOIA) 5 U.S. C. § 552 and the Privacy Act of 1974, (5 U.S.C. § 552a) and then determines whether the report is appropriate for public release (with or without redactions) or must be completely withheld from public release. Once the testimony or response to the congressional committee inquiry is finalized, it is then posted to the external OIG website at http://www.oig.doc.gov/Pages/Testimony.aspx. Our Public Affairs Specialist actively participates in the review process and engages in proactive disclosures by announcing upcoming public interviews.

Declassification

The OIG follows the Department’s “Manual of Security Policies and Procedures” for security of Commerce information. New employees receive briefings from the OSY. However, OIG does not have the authority to classify information. Some information, such as open or sensitive investigations and the related evidence, is confidential. PII and BII are protected by FOIA exemptions.

Participation

In order to meet OIG’s strategic goal to “Develop A Robust Infrastructure To Support A High-Performing OIG”, and to continue the improvement of network infrastructure, OIG examined the ways to improve its services to the workforce. Some of the ways the OIG is improving its network infrastructure is to leverage technology initiatives, such as Cloud computing and collaborating with industry on improvements in information storage and information sharing. For example, OIG has improved SharePoint services by implementing SharePoint 2013, Cloud Based Email Migration in FY 2016, and improving our bandwidth capacity. Another example of improvement is OIG actively engaging in the Department’s participation of DHS’ Continuous Diagnostics and Mitigation (CDM) program, which provides federal departments and agencies with capabilities
and tools that identify cybersecurity risks on an ongoing basis, prioritizes these risks based upon potential impacts, and enables cybersecurity personnel to mitigate the most significant problems first. And finally, OIG collaborates with industry experts to implement best practices by attending open data meetings of the OCIO council and encouraging employees to attend networking opportunities to obtain guidance on similar issues that other federal agencies experience.

**Collaboration**

The OIG will continue to utilize its Twitter account and Facebook page as a communication tool with members of the public and other stakeholders. The tweets invite input from the public and encourage the public to participate in idea-generation and to provide feedback on the Department’s initiatives, building an open two-way conversation. Using this method also encourages comments on OIG activities and inviting collaboration on OIG’s objectives to fulfill the mission of reporting fraud, waste, and abuse within government. The OIG also provides access to its hotline number on the OIG Twitter account and invites followers to sign up for Tweets of interest from the OIG Twitter account.

**OIG Open Government Initiatives**

The table below shows a list of initiatives for *OIG*

<table>
<thead>
<tr>
<th>Operating Unit</th>
<th>Project</th>
<th>Status</th>
<th>Estimated Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>OIG</td>
<td>Publish an inventory of our publicly available digital assets on inventory.data.gov</td>
<td>Completed (April 2015)</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>Continue to improve network infrastructure to ensure security of privacy information by analyzing and updating privacy controls</td>
<td>Ongoing/Continuous</td>
<td>December 2016</td>
</tr>
</tbody>
</table>

*Project – Publish an inventory of our publically available digital assets on inventory.data.gov*

The OIG is complying with the Open Data Memorandum (OMB M-13-13) by developing and maintaining an “enterprise data inventory” of the OIG publicly available data resources. This is OIG’s flagship initiative that supports the departmental plan and Open Government objectives established by the administration. As time permits, OIG will actively categorize and inventory our internal digital assets.
**Project – Improve OIG Records Management Policies and Processes by revising records management processes**

The second flagship initiative is to improve the records management processes by revising records management policies and OIG disposition processes. As part of this initiative, OIG posted a request for information (RFI) on FedBizOpps in FY 2015 to obtain information on records management for e-mail records in the cloud. This RFI was drafted in support of the “Managing Government Records Directive” (M-12-18, jointly issued by OMB and NARA) to meet the goal of managing all e-mail records in electronic format by December 2016. OIG is in the process of hiring a Records Management Specialist to improve the record management process.

**Project – Continue to improve network infrastructure to ensure security of privacy information by analyzing and updating privacy controls**

The OIG’s OCIO is also improving security by implementing the administration’s priority cybersecurity capabilities. These actions will assist the protection of the personal information OIG maintains and improve services to external and internal customers. In 2016, OIG made use of the Department’s leveraging of the DHS CDM program and completed implementation of Bandwidth upgrade to all OIG regional offices.
United States Patent and Trademark Office (USPTO)

United States Patent and Trademark Office (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 discovered, and employment opportunities 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 at the cutting edge of the nation's technological progress and achievement.

The USPTO advises the President, the Secretary of the Department of Commerce, and U.S. government agencies on intellectual property (IP) policy, protection, and enforcement; and promotes the 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 U.S. trading partners.
## USPTO Open Government Initiatives

### Table 15 - USPTO Initiatives

<table>
<thead>
<tr>
<th>Operating Unit</th>
<th>Project</th>
<th>Status</th>
<th>Estimated Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>USPTO</td>
<td>Improving Transparency</td>
<td>On Going / Continuous</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Data Visualization Center</td>
<td>Live / Operational</td>
<td></td>
</tr>
<tr>
<td></td>
<td>New USPTO Trademark App Open Source Code on Github</td>
<td>Live / Operational</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Open Data and Mobility</td>
<td>Live / Operational</td>
<td></td>
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<tr>
<td></td>
<td>MyUSPTO</td>
<td>Live / Operational</td>
<td></td>
</tr>
<tr>
<td></td>
<td>FOIA and Congressional Requests</td>
<td>Live / Operational</td>
<td></td>
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<tr>
<td></td>
<td>PTAB data API</td>
<td>Live/ Operational</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Improving Participation</td>
<td>On Going / Continuous</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Enhanced Patent Quality Initiative</td>
<td>Completed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Collegiate Inventors Competition</td>
<td>Live / Operational</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Camp Invention</td>
<td>Live/Operational</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Improving Collaboration</td>
<td>On Going / Continuous</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Regional Offices</td>
<td>Live / Operational</td>
<td>(March 2017)</td>
</tr>
<tr>
<td></td>
<td>USPTO Additive Manufacturing Partnership Meeting</td>
<td>Inactive</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Thomas Alva Edison Visiting Professionals Program</td>
<td>Live / Operational</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Public Advisory Committees</td>
<td>Live / Operational</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Improving the MPEP and TMEP</td>
<td>Live / Operational</td>
<td></td>
</tr>
</tbody>
</table>

### Highlights of 2017

**Regional Offices** - The USPTO regional offices in Detroit, Denver, Dallas, and San Jose, have three main objectives to: 1) create a great work environment to recruit and retain talent for our core operations across the country; 2) provide education and outreach services and information; and, 3) support our core mission of fostering American innovation, ingenuity, and competitiveness through offering services to entrepreneurs, inventors and small/medium businesses, while effectively engaging communities and local industries. The establishment of four USPTO regional offices, one in each time zone of the continental United States, fulfills a commitment dating to September 16, 2011 when the Leahy-Smith America Invents Act (AIA) was signed into law. All four regional offices were established between 2012 to 2015 and are operational, staffed and achieving these main objectives. The regional offices have conducted in person and virtual outreach and provided programming on a variety of intellectual property
related topics in all states in their respective regions; these efforts place the USPTO in the
community and offer direct assistance. This support is beneficial to individuals, organizations,
and local industries, thus influencing local economies. In establishing a regional presence, the
regional offices ensure easier access to resources and intellectual property protections that
innovators and entrepreneurs need to compete in today’s global economy where innovation
occurs.

**Open Data and Mobility** - 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. In this vein, by scaling up
the public’s access to machine-readable open data, the USPTO has established a new agency-
wide culture committed to creating unprecedented levels of openness of patent and trademark
information. By standing up a permanent “Digital Services and Data Analytics” office, the
USPTO is investing in data scientists, IT infrastructure, and analytics tools to publish USPTO
data in accessible formats. This gives businesses a clearer view of the competitive landscape as
they monitor technology trends and invest their precious R&D dollars. This endeavor also
empowers the USPTO—for the first time in history—to leverage our vast data sets to improve
performance management decisions through real time, actionable intelligence that highlights and
targets areas to improve operational efficiencies, quality, training programs, and customer
service.

**Big Data** – After establishing a permanent Digital Services Big Data (DSBD) portfolio and a
public facing Open Data portal in 2016, the USPTO authored a Big Data Roadmap to apply
innovative technology to critical gaps at USPTO. Leaders today are faced with increasingly
complex problems to solve. Problem solving methods from 20 years ago are less effective today.
Responding to immediate fire drills requires an established response protocol. The application of
Big Data and Data Science will support leaders to identify, out of hundreds of seemingly minor
cconcerns, the dozen that may cause a crisis if not addressed early on. These more advanced
decision-making techniques can more clearly identify key issues, provide near real-time
reporting and speed problem resolution. Big Data enables management to combine both
qualitative and quantitative data in a decision-making framework to improve operational
effectiveness at USPTO.

As a result of this strategic direction in Big Data, the DSBD portfolio has leveraged industry
leading technology to develop and deploy a Big Data Reservoir that is populated with multiple
datasets, including an interface to the data from the Patent Trials and Appeals board and a public
interface to download and visualize UPSTO public data.

**Research Datasets** - To advance research on matters relevant to intellectual property,
entrepreneurism, and innovation, the Office of Chief Economist (OCE) releases datasets to allow
for study of the economics of patents and trademarks—an element in the USPTO economics
research agenda. OCE presents these data for the first time in forms convenient for public use and academic research, consistent with the agency's responsibility to make patent and trademark information open and transparent. Furthermore, it supports White House policy championing transparency and access to government under the "data.gov" umbrella of initiatives. Since these data have not been commonly used in the research community, OCE has developed supplementary documentation providing a comprehensive description of datasets and offering initial findings.

**Data Visualization Center** - Access to timely information and statistics is important for any business plan. In knowing the processing timelines for patent applications, as well seeing up-to-date statistics about other internal operations of the USPTO aids in setting reasonable expectations and business objectives.

**MYUSPTO:** The USPTO recently launched a new tool to provide IP stakeholders with a personalized homepage and gateway to their USPTO business needs. The site improves stakeholders’ ability to manage their intellectual property portfolio. With a single sign on, you can now track patents and trademarks in a central location and receive email notifications when the certain changes occur. The site also allows users to save USPTO webpages as bookmarks, so they won’t need to save and manage them separately in their browsers. Additionally, MyUSPTO provides current news, information about upcoming events, and is able to connect with USPTO Facebook and Twitter accounts. The site uses “widgets,” which are small applications that display snippets of important information; aka shortcuts to larger USPTO applications and affiliated sites. The entire site is fully customizable, and users can add a little or as much as they prefer. There is no cost to sign up and use the site.

**USPTO Trademark App Open Source Code on Github:** In advance of the new Federal Source Code Policy and in support of the Administration’s Open Government Initiative, we have been publishing content on Github for over a year, and it now includes source code for a mobile application for trademarks. The new published source code on Github is for a sample application enabling a user to access and track the status of a trademark. This application enables the user to receive a push notification anytime the status of a trademark application changes. The idea for this app began with feedback from the leadership in Trademarks, and we believe that it will also be a useful tool for our own employees. We’re making our code for this application open to the public, so you can also use it in your own projects, improve it so it works best for you, or create an entirely new application.

**Status Updates on Previous Initiatives**

- **Data Visualization Center** – The Data Visualization Center is a quick source of USPTO information regarding processing and quality measures in Patents, Trademarks, the Office
of Policy and International Affairs, and the Patent and Trademark Trial and Appeal Boards. It is available on the USPTO home page by selecting Learning and Resources and subsequently choosing Open Data and Mobility. Once there, users have the opportunity to see “dashboards” of specific data from each business unit, updated on a quarterly basis.

- **Improving the MPEP and TMEP** – The USPTO continues to rely on an innovative online tool that was launched in January 2011 to foster public discussion of ideas for improving the Manual of Patent Examining Procedures and Trademark Manual of Examining Procedures. Collected suggestions and comments are considered during the production of subsequent editions of these important publications.

- **Thomas Alva Edison Visiting Professionals Program** – This program, which USPTO started in 2012, taps expertise of distinguished IP professionals and academics by enlisting leaders in academia and industry for up to six months on a full time basis. This program is currently inactive due to a freeze on personnel hiring and changes in USPTO leadership. Former Edison Scholars have contributed new ways to improve the USPTO's efficiency and performance, decrease burdens on applicants, improve patent quality, and understand the impact of IP on the economy.

**Goals for 2018-New and Expanded Initiatives**

- **PTAB** – Maintain the issuance of high quality decisions for ex parte appeals and AIA trials, continue to meet statutory deadlines for the AIA trials, and continue to reduce and manage the backlog of ex parte appeals.

- **Next GEN IT + Data** – Ensure that IT interfaces and processes for employees, customers, and the public are made more useful and user-friendly (including for patents, TM and PTAB), while expanding access and utility of agency data, both current and historic to public and for use internally.

- **Regional Offices/Outreach** – As all four offices are operational and staffed, our expanded initiatives for FY2018 are to increase use of USPTO services available through the regional offices and continue to amplify USPTO IP education and policy efforts through coordination with USPTO HQ.

**Ongoing Initiatives**

**Participation in Transparency Initiatives.** The USPTO participates in Data.gov by attending monthly meetings sponsored by GSA and works with Commerce Department counterparts to update and maintain the USPTO inventory of its data assets in compliance with the metadata standards. The agency also provides monthly submissions to the IT Dashboard.
Records Management. Since the issuance of the Presidential Directive M-12-18, the USPTO has been working diligently to implement the Capstone Approach for managing email records agency-wide; using Office 365 as its technical solution to achieve compliance by December 31, 2016. We have also been proactive in our efforts to ensure compliance with managing all permanent electronic records in an electronic format to achieve compliance by December 31, 2019. We have conducted market research and developed a high-level architecture framework that will position us to begin piloting two or more Next Generation business systems in the upcoming fiscal year. Additionally, we are working with our critical partners to reduce the footprint of managing physical records and consider the long-term benefits of digitizing permanent records.

Freedom of Information Act (FOIA) Requests. Freedom of Information Act (FOIA) Requests. The USPTO has an excellent capacity to respond to FOIA requests in a timely manner and processed 427 requests in FY17. The USPTO FOIA Office continues to monitor and examine the processing of FOIA requests received each year to determine how FOIA processing can be further improved. The primary plan for improving agency FOIA performance will be to continue providing additional training to USPTO FOIA personnel, records custodians, and other agency personnel.

Congressional Requests. In addition to a dedicated mailbox, congressional@uspto.gov, for constituent issues, the USPTO is currently redesigning the Office of Governmental Affairs webpage to a more useful format. OGA has nine personnel, with one person dedicated to handling Congressional requests. When a request is received, staff consults with Patents or Trademarks accordingly. The OGA director reviews the Congressional query, the researched answer and responds to Congress. The requests are not made public, as they often refer to specific patent applications that are privacy-protected by law for a specific period of time.

Participation. The USPTO has a number of mechanisms that allow the public to participate in the agency’s core mission.

One such mechanism is Customer Partnership Meetings (CPMs), which are built upon the engagement of both internal and external stakeholders to provide enhanced communication channels. This provides a valuable opportunity for external stakeholders to meet directly with USPTO representatives in a collaborative forum. CPMs allow the USPTO to share plans and operational efforts to better educate and inform stakeholders. These meetings also enable the patent community to share ideas, experiences, and insights as well as discuss patent examination policies and procedures, mutual concerns, and solutions to common problems. In the last year alone the USPTO has held the following CPMs:

- Additive Manufacturing – June 1, 2017
• Technology Center 2600: Electrical Communications – July 13, 2017, and January 17, 2018
• Biotechnology/Chemical/Pharmaceutical – August 2, 2017, and November 6, 2017
• Technology Center 2800: Semiconductors – August 22, 2017
• Cybersecurity – September 6, 2017
• Business Methods – September 20, 2017, and March 15, 2018
• Technology Center 1700: Chemical and Materials Engineering – March 20, 2018

In addition to CPMs, the USPTO has several outreach programs and events designed to increase public engagement, provide education on the benefits of intellectual property, and establish collaborative relationships with stakeholders. The following outreach events have been held in fiscal year 2018 thus far:

Monthly Patent Quality Chats
  o Examiners Provide Their View on Prepared Applications – October 12, 2017
  o How is an Examiner’s Work Product Reviewed – November 14, 2017
  o Unlocking Open Data for our Patent Customers – January 9, 2018
  o eMod Update: Patent Center and Structured Text – February 13, 2018
  o Subject Matter Eligibility: Guidance & Examination Resources – March 13, 2018
  o Strengthening Your IP Internationally using the expanded Collaborative Search Pilot – April 10, 2018
  o For dates and topics of upcoming Patent Quality Chats, click here

USPTO and Minority Business Development Agency Webinar Series
  o Flying High with Financial Literacy – December 5, 2017
  o Embracing Online Smart Technology to Grow Your Business – February 7, 2018

Virtual Instructor Led Training
  o Claim Interpretation: Preamble – February 13
Claim Interpretation: Product by Process – April 3

Intellectual Property Overview Workshop in Spanish

- A workshop provided at the Greater Washington Hispanic Chamber of Commerce Business Expo – March 16

eCommerce Modernization (eMod) Info Sessions for Stakeholders – March-April, 2018

Bi-monthly Patent Trial and Appeal Board (PTAB) Boardside Chat webinar series:

- Design Patent Appeals – February 1, 2018

The USPTO also has a focus on assisting independent inventors and small businesses through the process of obtaining the intellectual property protection needed to safeguard their inventions. There are many initiatives to address the demands of novice patent filers and programs that are tailored to proactively conduct outreach to educate the independent inventor and small business communities on the benefits of intellectual property and how to navigate the patent process to secure a quality patent, such as:

The 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 business concerns, the USPTO launched the Pro Se Assistance Program, the first of its kind, to help inventors protect their valuable intellectual property. This user group is as diverse as the inventions they seek to protect and include everyone from students to veterans, retirees, and PhDs.

- This program helps make the U.S. patent system more transparent and reduces obstacles for unrepresented patent applicants. It also enhances 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.

- Customer service is provide via telephone, email, U.S postal service, and one-on-one appointments (both in-person at USPTO headquarters and virtually)

The Pro Se Examination Art Unit.

- One component of the Pro Se Assistance Program is the Pro Se Examination Art Unit, comprised of specially trained and experienced examiners dedicated to examining applications from unrepresented applicants. This Art Unit, launched in
2014, is a specialized team at the USPTO that provides personalized service and support to inventors without legal representation.

- The Pro Se Examination Art Unit has delivered a positive increase in the pro se allowance rate, developed and provided specialized training to examiners to raise awareness of pro se specific issues and improve quality of pro se applications, and implemented best practices to improve the customer experience of pro se filers.

Stakeholder Training on Examination Practice and Procedure (STEPP) for independent inventors

- STEPP is a 3-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 within the program is derived from training delivered to patent examiners and other USPTO employees.

- Participants learn how an examiner is taught to use the MPEP to make patentability determinations and gain a perspective of an examiner’s point of view that may increase their situational awareness and aid in compact prosecution.

- This fiscal year, STEPP courses were held on January 9-11, February 6-8, and March 20-22, 2018

Patent Pro Bono Program

- This program provides under-resourced inventors across the U.S. opportunities to secure legal assistance for their patent needs. Patent practitioners donate their time to help inventors who cannot afford to obtain legal advice on the filing and prosecution of patent applications.

- The program seeks to match eligible inventors with registered patent agents or patent attorneys. Inventors interested in participating in this program, must meet eligibility requirements:
  - Income below a certain threshold
  - Knowledge of the patent system
  - Possession of an actual invention – not just an idea

- Currently, twenty regional not-for-profit programs operate across all fifty states to endeavor to match under-resourced inventors and small businesses with a patent practitioner.
Patents Ombudsman

- The Office of Patents Ombudsman was launched in April 2010. The office assists applicants, including pro se applicants, by ensuring the patent application process is working the way it is intended and that each customer understands the pathway forward for his or her application.

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 internet site hosts a wealth of information about how to navigate through the process, the amount of information and various 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 intellectual property needs of the public. The PTRCs provide the human touch that is often so very beneficial when helping inventors and small businesses navigate through the patent process and find information they need to protect their intellectual property.

Law School Clinic Certification Program

- The Law School Clinic Certification Program consists of independent law school clinics that provide free legal services to qualified inventors. Law students provide the services under the supervision of an experienced law school supervising attorney. Over 50 law schools currently participate in the program.

- In each of the clinics, students are granted limited recognition to practice directly before the USPTO. The students work with inventors to prosecute their patent applications by meeting with the inventors, drafting patent applications, and responding to office actions, all under the oversight of an approved supervising attorney affiliated with the law school clinic.

Inventors Assistance Center (IAC)

- Independent inventors can contact the USPTO's Inventors Assistance Center 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.

Micro-Entity Status
In 2013, when the USPTO adopted and adjusted fees during implementation of the America Invents Act, the micro entity status was created allowing independent inventors meeting certain eligibility requirements to be afforded a 75 percent reduction on most fees. The micro entity status allows qualifying independent inventors and small businesses an even greater discount than that offered by the small entity status.

Inventors Eye

- USPTO’s quarterly electronic newsletter for and about America’s independent inventor and small business community.
- Each 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.
- The first issue was published in 2010 and now has approximately 30,000 subscribers.

Inventor Info Chat

- Started in 2017, a free, monthly webinar series provides information to assist in filing a patent application, understanding the patent prosecution process, and information about services available for applicants. Videos and presentations for each chat are catalogued on www.uspto.gov.
- Below are the Inventor Info Chats that have been held so far in fiscal year 2018
  - Free Legal Services for Inventors – November 16, 2017
  - Overview of the Patent Examination Process – January 18, 2018
  - Claim Drafting – February 15, 2018
  - Common Mistakes and Support After Filing – March 15, 2018
  - Understanding the Application Data Sheet – April 19, 2018
- For the dates and topics of upcoming Inventor Info Chats, click here

Independent Inventors Conferences
Annual conference that provides a venue for intellectual property and small business subject matter experts to deliver valuable information regarding intellectual property and commercialization best practices that can help attendees be better positioned for success.

The USPTO also invites participation at these events by representatives of federal and local resources such as the Copyright Office, Small Business Association, Minority Business Development Agency, attorneys from the Intellectual Property Law Associations, and subject matter experts in marketing.

Independent inventors and small business owners are also invited to share their personal experiences, success stories, and best practices for obtaining intellectual property rights without representation.

Women’s Entrepreneurship Symposium

The USPTO hosts the Women’s Entrepreneurship Symposium to recognize the key role that women play in fostering innovation and entrepreneurship. This event provides an opportunity for the USPTO to provide a platform for IP subject matter experts to share knowledge with women-owned businesses. The event is also a great opportunity for innovators and entrepreneurs, both men and women, to network and interact with officials from the U.S. Patent and Trademark Office (USPTO).

The USPTO will be hosting its annual conference for independent inventors, entrepreneurs and small businesses—Invention Con 2018—from August 17-18 in Alexandria, VA at USPTO headquarters.

The USPTO also has a focus on engaging with its international stakeholder community to ensure they are able to participate in the agency’s core mission. For example, the USPTO provides outreach on various international work sharing programs to stakeholders through webinars and speaking engagements at conferences and meetings. These work sharing programs include the Patent Prosecution Highway and Collaborative Search Program, and the USPTO regularly participates in various events around the world to further efforts and increase awareness and usage of these programs. The USPTO also engages with international offices to discuss and encourage increased collaboration in the various work sharing programs, as well as in the development of new work sharing programs aimed at increasing global quality and patent protections.

Collaboration
• Programs such as Patents for Humanity and the Thomas Alva Edison Visiting Professionals Program—as well as the USPTO’s partnership with Invent Now on Collegiate Inventors Competition and Camp Invention—allow the agency to obtain ideas from and increase collaboration with those in the private sector, non-profit, and academic communities.

Public and Agency Ideas. The USPTO responds to public feedback on a routine basis, and public engagement will be an integral part of the USPTO’s periodic review and modification of this plan moving forward.