

# Environmental Protection Agency (EPA)

## Open Government Plan 3.0



The Environmental Protection Agency (EPA) has a rich legacy as an open organization and views environmental information as a strategic asset in our mission to protect human health and the environment. The Administration's Open Government (OpenGov) initiative has been a catalyst to re-examine our open practices with the goal of bringing tangible benefits to the public. As with the Agency's two previous OpenGov plans, this document provides the public with an update on Federal-wide as well as EPA-specific efforts that support transparency, participation and collaboration. In addition to our plans, EPA informs and engages the public on our open progress by keeping the [www.epa.gov/open](http://www.epa.gov/open) and [www.epa.gov/digital](http://www.epa.gov/digital) websites up to date, posting reports on our progress on a quarterly or bi-annual basis, and offering avenues for the public to provide comments.

## I. New and Expanded Initiatives

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This section describes EPA's current progress and plans in support of new and expanded Government-wide initiatives.

### A. Open Data

EPA is currently in compliance with or on track to fulfill the requirements of the May 9, 2013, Open Data Memorandum (OMB Memorandum M-13-13) and Project Open Data, leveraging EPA's Environmental Dataset Gateway (EDG) and policy efforts to foster a long-term commitment to effective data management and publication as appropriate. Details can be found in our [implementation plan](#) for open data posted in November 2013.

- Policy and Application Programming Interfaces (APIs)

EPA's [Strategic Data Action Plan \(SDAP\)](#) set guiding principles, goals, and standards in support of open data. The Agency's Environmental Information Management Policy (EIMP), currently being developed, is anticipated to institutionalize open practices as an EPA policy. The SDAP and draft EIMP establish the policy, define the means for registering data assets, and set the expectation that data assets will be made available to the public in consumable formats where it is technically and legally feasible.

[Developer Central](#) is a resource for developers who want to build applications using EPA data and Web services. It provides developers a venue for ranking EPA resources and interacting with Agency staff and other developers through the Data and Developer's Forum. Developers can also request preferred formats for data such as APIs and tag and perform cross-category queries of datasets, APIs, codes, and widgets. A recently added feature provides all of the Agency's widget code in one place with examples of uses profiled to encourage and foster innovation. Developer Central fully incorporates the resources the Agency maintains in the EDG and our Reusable Component Services (RCS), EPA's central IT services catalog ([www.epa.gov/rcs](http://www.epa.gov/rcs)).

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To help developers find the right API, many can be found on individual webpages for a particular program (e.g. the [fuelconomy.gov web services page](#) jointly sponsored by the Department of Energy and EPA) and at [Developer Central's API page](#).

- Enterprise Data Inventory and Public Data Listing (PDL)

EPA's PDL is generated by the EDG, provided to Data.gov, and available from our [digital strategy webpage](#) in the "Developer Resources" box. We are expanding the EDG to include data resources that have not yet been made public, with the ability to tag each as public, non-public or restricted. As part of the Agency's EIMP, we are developing the process to evaluate datasets and inform stakeholders of the public access status of each, and will report on our progress as part of EPA's activities in support of the Open Data Policy at <epa.gov/digitalstrategy>.

The Agency has taken many steps to encourage use of the array of datasets already published, including developing tools such as the Data and Developer Forum and Developer Central. For example, we conducted a webinar in December 2013 to introduce communities to the basics of the Toxics Release Inventory (TRI) including historical case studies. The target audience was grassroots community groups, environmental justice organizations, and others who serve communities exposed to pollution. As another example, the recent Developer Central redesign includes ways to engage developers directly through EPA participation in hackathons and by encouraging universities to incorporate a course component with EPA developer resources in some computer science classes.

In developing our policies, procedures and tools that support the Open Data Policy, we encourage consistent application across the Agency including:

- Relying on the EDG to register, manage, publicize, and provide with access to our data including administrative and statistical data requested under OMB Memorandum M-14-06 "Using Administrative Data for Statistical Purposes," issued in February 2014
- Establishing requirements and procedures to provide the public access to published scientific articles at no cost by establishing the repository with the goal of also providing access to the associated data in the future

### B. Proactive Disclosures

The Agency has proactively made a great deal of information public for many years. Examples include:

- The [Registry of EPA Applications, Models and Databases \(READ\)](#), EPA's authoritative source of information about EPA information resources
- [Electronic Newsroom](#), for journalists and other citizens, which includes ability to sign up for news feeds and press releases
- EPA [testimony and hearings](#) before Congress
- [Toxics Release Inventory](#)

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- Information [about the Agency](#) including organization charts, points of contact and phone numbers, facility locations, mailing addresses, and an electronic, searchable employee directory

EPA also reviews common or frequent Freedom of Information Act (FOIA) requests to determine if information should be proactively disclosed. For example, several years ago EPA was responding to numerous requests from realtors, banks, and other similar institutions to determine if a property pending sale had any environmental records. Now instead of submitting a FOIA request, anyone can visit [MyProperty](#) and immediately determine if EPA has any records related to a specific address. EPA's [2013 Chief FOIA Officer Report](#), submitted annually to the Department of Justice (DOJ), provides additional information regarding the steps we take to openly share information.

In a larger effort, EPA is a founding partner and the program manager of the [FOIAonline](#) application-- a multi-agency FOIA solution that allows the public to make and track a FOIA request, search other requests and read responsive documents that have been posted by participating agencies. FOIAonline also allows agencies and the public to generate reports on FOIA processing by those participating agencies. Through the development of the National Action Plan, a number of external organizations emphasized their interest in extending the functionality offered by FOIAonline to additional agencies. The current FOIAonline partnership includes EPA, Department of Commerce, U.S. Navy, Customs and Border Protection, Pension Benefit Guaranty Corporation, U.S. Merit Systems Protection Board, Federal Labor Relations Authority, and the Office of General Council at the National Records and Archives Administration. EPA is actively working with additional agencies who are interested in joining the partnership to meet their FOIA needs.

### C. Privacy

EPA prepares and submits all required compliance reports in support of privacy. Required reporting includes:

- Quarterly and annual Federal Information Security Management Act (FISMA) reports on implementation of Privacy Act
- Federal Register notices for system of records as required by the Privacy Act
- System of records notices published in the Federal Register
- Biennial report on computer matching activities submitted to OMB
- Quarterly and annual FISMA reports on privacy data specified by OMB
- Privacy Impact Assessments, as required by Section 208 of the E-Government Act

### D. Whistleblower Protection

The Whistleblower Protection Enhancement Act of 2012 requires Agency Inspectors General (IG) to ensure that employees are adequately informed about whistleblower protections, rights and remedies. The EPA IG has designated an attorney as the Whistleblower Protection Ombudsman who is responsible for educating employees and has communicated that position and its associated role to all EPA personnel. The Whistleblower Protection Ombudsman program has been operational for approximately one year and has fielded inquiries from several EPA employees, although the program is

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still being developed. The Ombudsman is focused on meeting the U.S. Office of Special Counsel requirements for program certification.

### E. Websites

EPA provides the public with relevant information on the topics of Open Government and Open Data through the websites that are prescribed by OMB. For example the [www.epa.gov/open](http://www.epa.gov/open) site is routinely updated with progress reports, spotlights of innovation, and the most current version of documents such as this plan. We also report open data related activities on the digital strategy page, [www.epa.gov/digitalstrategy](http://www.epa.gov/digitalstrategy).

Additionally, EPA has invested significant time and energy over the past several years to improving our comprehensive set of websites with an emphasis on improving the user's experience. The transformation of EPA's website to a topic-based site is underway to better meet the needs of website visitors. Our modernized website is managed within a Drupal-based Web Content Management System (WebCMS) and designed to facilitate a visitor's top tasks. With a single point of Internet presence, centralized governance, and distributed content development, EPA.gov uses standard templates to provide visitors a more consistent user experience. We use quantitative Web analytics reports to focus resources on the most popular and frequently accessed pages. As of Quarter 2 in Fiscal Year (FY) 2014 we have transformed over 10,000 content pages and published the information in resource directories and microsites. The content transformation is scheduled to be complete at the end of FY 2015.

## II. Ongoing Initiatives

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### A. Transparency Initiatives

The Agency continues to actively support and participate in Federal-wide transparency initiatives, including:

- Data.gov: EPA continues to be an early and frequent publisher on Data.gov, and supplies a robust suite of metadata for datasets published on the site.
- eRulemaking: EPA serves as the program manager of eRulemaking and has implemented a revised look and feel, developed APIs, and partnered with other agency and non-government organizations to leverage social media.
- IT Dashboard: EPA submits the Exhibit 300 portfolio to OMB on a monthly basis, and we have eleven Major investments. The information submitted includes project, activity, cost, schedule, performance metrics, risk, and acquisition information. In compliance with OMB's requirement, the Agency submits this update by the last day of every month with the most recent update submitted on May 29, 2014.

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- Recovery.gov: EPA’s Recovery.gov activity ceased as of September 30, 2013.
- Grants.gov: EPA provides the public with lists of all current EPA grants that are open opportunities on Grants.gov and on the [Agency grants website](#).
- CFDA.gov: EPA recently initiated the FY 2014 update cycle for the Catalog of Federal Domestic Assistance.
- SAM.gov: In 2012, the Agency implemented an interface between the EPA Acquisition System (EAS) and SAM.gov to pull Real-Time Vendor Registration Information and Representation and Certification Information. EPA also uses SAM.gov to log, update and report Exclusions and to load Vendor information into the financial system, Compass. The Agency participates in groups driving the update and integration with the Contractor Performance Assessment Reporting System (CPARS). And although SAM.gov is not currently integrated with Federal Business Opportunities (FBO) and Federal Procurement Data System (FPDS), EAS interfaces with those systems to report Real-Time Pre-award and/or Post-award procurement information.
- FSRS.gov: EPA is currently participating in a government-wide focus group for the Federal Subaward Reporting System (FSRS) to improve its functionality.
- USAspending.gov:
  - The Agency submitted a plan to compare and validate USAspending.gov funding information with data in the Agency’s financial system, Compass, as of August 2013.
  - EPA submitted the first quarterly federal spending assurance with metrics on accuracy in March 2014. The contract’s work stream submits an annual verification to OMB, and grants are automatically validated by pulling directly from the financial system.
- Example of Transparency:
  - [ChemView](#) is a system that improves access to health and safety information on chemicals regulated under the Toxic Substances Control Act (TSCA).
  - The goal is to help people easily get information needed to make safe chemical choices.
  - It includes chemical names, Chemical Abstracts Service (CAS) numbers and endpoints.
  - Managed and housed in EnviroFacts with plans to include web services in the future.

### B. Public Notice

The Agency actively works to notify citizens of our actions and to seek input through many avenues. The public can find information on EPA’s website for a particular program or geographic location, as well as subscribe to targeted newsfeeds or alerts from EPA’s [Newsroom](#). We also provide information on upcoming and highlighted opportunities to participate and collaborate with the Agency in our OpenGov progress reports, which have been posted quarterly or bi-annually since the OpenGov program was launched. Examples include:

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- Public meetings, webinars, congressional appearances, and stakeholder meetings

### C. Records Management

EPA's records program is actively addressing recent records related requirements. We publish information about our Records Management program on the Agency's Intranet records site. The Report on Managing Government Records dated March 27, 2012, commits the Agency to manage emails as records subject to the Agency's records management policies and schedules, which have been implemented. Additionally, the Agency's Senior Agency Official Report, posted on the Intranet site on January 28, 2014, addresses how the Agency will further address electronic records and digitization efforts including milestones.

### D. Freedom of Information Act (FOIA) Requests

EPA's FOIA program has consistently applied program improvements to increase responsiveness to the public. The Agency is frequently identified as a leader in terms of FOIA responsiveness and processing activities by external groups that follow FOIA programs. An example is the Center for Effective Government's [2014 Access to Information Scorecard](#). Relative to previous years, EPA's FOIA backlog increased in FY 2013 in part due to staffing impacts from the mandatory furloughs all EPA employees were required to take, and due to the complexity of several notable FOIA requests. Additional information is available in the [FY 2013 Chief FOIA Officer Report](#).

The Agency's FOIA website is being redesigned, and the updated site will provide easier access to the FOIA process, contact information for offices responsible for FOIA, and links to the two FOIA reports EPA produces annually: the EPA Annual FOIA Report, and the Chief FOIA Officer Report which is submitted to the Department of Justice (DOJ). If a website visitor selects a link to create or track a FOIA request, they are redirected to FOIAonline.

### E. Congressional Requests

Information about EPA's Office of Congressional and Intergovernmental Relations is located at the [program's website](#).

### F. Declassification

EPA does not normally manage classified information. We do manage other sensitive information on a regular basis as part of normal operations. While it is critical that sensitive information, e.g. Personally Identifiable Information (PII) and Confidential Business Information (CBI), must be managed appropriately, the Agency understands that the information could be of great benefit if determination is made that it can be shared. In the area of CBI, we have made great strides in promoting the declassification of information that may be inappropriately deemed CBI. For example, EPA's declassification challenge urged companies to voluntarily declassify some of their CBI claims for chemicals subject to the Toxic Substances Control Act (TSCA). A number of companies responded and

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released health and safety studies that are of value to the public. Voluntary releases and new releases based on EPA review are available at:

[http://www.epa.gov/oppt/existingchemicals/pubs/declassified/declassified\\_claims.html](http://www.epa.gov/oppt/existingchemicals/pubs/declassified/declassified_claims.html).

### G. Participation

As previously described, the Agency provides the public with many avenues, including public meetings, webinars, and conferences, to learn about, participate in, and collaborate with us on our processes and meeting the Agency's mission. Examples can be found frequently in the electronic Newsroom (and alerts/notifications), OpenGov Progress Reports, Developer Central, and Regional and program-specific web pages.

### H. Collaboration

The avenues and examples for participation also apply to collaboration. While EPA's mission requires collaboration with other federal agencies (OFAs) for specific programs, EPA and many OFAs are collaborating in new and innovative ways to solve common challenges.

### I. Flagship Initiative

Two efforts are being featured as candidate Open Government flagships: The Enforcement and Compliance History Online (ECHO) and AirNow systems. These two systems play a significant role in collecting and managing information that is critically important in assessing environmental conditions and the operational status of regulated entities that may impact such conditions.

#### 1. **Flagship: Enforcement and Compliance History Online (ECHO)**

EPA's Enforcement and Compliance History Online ([ECHO](#)) Website, [recognized as a model of transparency](#), is a go-to resource for information about environmental inspections, violations, and enforcement actions for more than 800,000 EPA-regulated facilities. The data (sourced from EPA, states, tribes and local environmental agencies) are exposed as web services to allow data reuse, and the new platform allows for more frequent data updates and future public participation. Public input and collaboration is facilitated by the ECHO feedback form, and the Agency has offered to host a webinar to help the public understand and use the data and tool.

EPA launched the site in 2002, and ECHO currently provides answers to 2 million queries per year regarding environmental regulatory compliance and enforcement data. The new site still provides public access to searchable data for Clean Air Act (CAA) stationary sources, Clean Water Act (CWA) direct dischargers, Resource Conservation and Recovery Act (RCRA) hazardous waste handlers, and Safe Drinking Water Act (SDWA) public water systems with pollutant releases, with Census data integrated for context.

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Web services allow developers to design custom applications using a live feed of data from ECHO. Over the next year, EPA will provide a complete collection of documented "GET" or query-only Web services, available through a simple URL http link and providing output in XML, JSON, or JSONP formats. Documentation for using each of the services will be posted on the ECHO site.

The modernization process has moved ECHO from a custom-coded mainframe system to a sustainable, scalable Oracle data mart and trimmed operation and maintenance costs. Building website reports from Web services will help shift the focus from data presentation to emphasizing structured data and metadata--making these underlying data openly available for use within agencies, among agencies, in the private sector, and by citizens. Moving toward increased user participation will allow EPA to respond to customers' needs, make it easier for them to find and share information, and accomplish tasks. ECHO modernization focuses on enhancing the quality and timeliness of data and informative content, simplifying transactions, and increasing accessibility and timeliness as resources allow.

We have modernization features planned in the coming years (shown below), and details on these advancements will be reported in future OpenGov progress reports.

- FY2014
  - Expanded search capabilities for multimedia facility and drinking water systems
  - Enforcement case report
  - Publishing information sooner
  - Making more ECHO data available on data.gov
- FY2015
  - Expanded search capabilities for CWA facility, enforcement case, RCRA facility, and CAA
  - Remove many limitations on how much data can be downloaded and mapped
  - User-defined alerts for locations of interest
  - Expanded data integration to enhance mapping capabilities
  - Options for monitored peer-to-peer communication tools

### **2. Flagship: AirNow Supporting Collection by Public Scientists**

EPA's AirNow program provides the public with real time air quality data and forecasts -- actionable information citizens can use to protect their health. Collecting data from state, local, tribal, and federal agencies, AirNow is the only national repository of real time air quality data and forecasts. The system contains ambient measurements from thousands of monitoring stations around the United States, Canada, and Mexico, as well as forecasts from over 400 U.S. cities.

Besides digital content (e.g. the website, free EnviroFlash email service, and smartphone apps) AirNow reaches the public via traditional media by collaborating with weather and media companies. Partnering with Weather Service Providers (WSPs) and media companies that supply weather data to print, television, and Internet media outlets, widens the distribution of this important information.

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The AirNow system also serves as a model for other nations. AirNow-International (ANI) was released in 2010 after collaboration with the Shanghai Environmental Monitoring Center (SEMC). The ANI package currently runs in the United States, Mexico, and China, with many other nations interested in the system.

Before the AirNow system began in 1997, the public had fragmented, if any, access to real time air quality data or forecasts. Now, the public has 24/7 access to air quality information, while partners have access to their own and neighboring states' data for in-depth analyses. Social media offers public participation via Facebook and Twitter. An API allows easy access to data feeds, opening the system to outside developers who are free to develop innovative new applications.

### Future Projects

A pilot project is underway to allow AirNow to accept and process small sensor data, with a time resolution of one minute or less in contrast to the current one hour time resolution from the expensive and semi-permanent regulatory monitors. As the Agency prepares for a new wave of citizen scientists, the AirNow program will provide critical infrastructure. We will also add small but robust Web applications to equip government partners with more efficient tools to manage their air quality information.

AirNow will soon collect emergency air quality data provided by state and local agencies, emergency responders, and the United States Forest Service (USFS) during wildfire and prescribed burning episodes. This new data stream will allow AirNow to inform the public about air quality effects during fires, while also providing a central data repository for EPA, USFS, and emergency response agencies. AirNow's work with National Aeronautics and Space Administration (NASA) resulted in a data fusion engine, necessary to integrate satellite estimates with ground level observations, but flexible enough to incorporate small sensor data, modeled data, or any other type of gridded data with minimum development costs. A proposal is being developed to expand that satellite data fusion, possibly with small sensors as well, internationally.

We have modernization features planned in the coming years (shown below), and details on these advancements will be reported in future OpenGov progress reports.

- FY2014
  - Apply for NASA Research Opportunities in Space and Earth Science (ROSES) grant to integrate satellite air quality data
  - Release ANI in Mexico City
- FY2015
  - Modify AirNow infrastructure to accept sub-hourly data
  - Incorporate data from ORD's prototype Village Green system

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- Test several small sensors
- Expand web services and AirNowTech to handle sub-hourly data

Beyond FY2016, we plan to design a Web version of the ANI Data Management System component, making it easier to adopt by other countries.

## **J. Public and Agency Ideas**

We established the EPA-wide OpenGov Implementation Work Group (OGIWG) to oversee and provide input to the Agency's OpenGov efforts including this plan. Members of the OGIWG work with their leadership and staff for cross-Agency collaboration and input.

For external input, we continue to receive and review input via our blog, Developer Central, and Data.gov among other tools. We also met with and received suggestions from several outside groups including:

- Government Accountability Project (GAP) whistleblower organization
- Center for Effective Government
- Sunlight Foundation
- World Resources Institute
- Union of Concerned Scientists
- Government Accountability Project

In developing this plan, we reviewed and considered input from both within and outside EPA with an emphasis on efforts that are in concert with existing Agency priorities and are executable with available resources. We will continue to solicit and consider suggestions from our stakeholders.