

U.S. Environmental Protection Agency

Open Government 2017 Progress Report

The Environmental Protection Agency (EPA) has a rich legacy as an open agency, and we have leveraged the Open Government Initiative to ensure the continuation of this culture and our commitment to protecting public health and the environment. In the Fall of 2016 EPA released its [Open Government Plan 4.0](#). The Plan included goals and implementation details for activities that advance the culture of transparency, participation and collaboration in the Agency. This Progress Report highlights the advancements made on these goals from Fall 2016 through Fall 2017. The EPA will update its Open Government goals in the next release of the Open Government Plan which is planned for Fall 2018.

<i>Activities</i>	<i>Objectives/Milestones</i>	<i>Page¹</i>	Progress made from September 2016 - August 2017
A-16 Portfolio Management	Continue leading federal effort to collaborate on mapping tools that are important across agencies and projects.	52	In progress.
Adoption of open source software/code e.g. swagger, Github	Adopt open source code, tools, licensing, and examine repository options.	34	Successfully publishing of EPA's code inventory from RCS to Code.gov, the Federal Government's code inventory. Work is wrapping up to publish EPA's Source Code Policy. Continue exploring source code repository options to address the limited number of private repositories that are available under Github. Work is beginning to develop licensing guidance to team's developing code.

¹ Page Number from 2016 Open Data Plan

AirNow-domestic (2014) and International components (2016)	Expand monitoring stations to 14 locations worldwide and develop/deploy cloud-based data system.	53	AirNow's Department of State page now shows data from 21 sites worldwide. The cloud-based AirNow software is nearly complete and we are seeking a pilot county to install and test.
API Strategy	Release Agency API Plan, improve API documentation, test GSA's API management tool, pilot SQL/API builder User Interface, and work with Developers Guild to share data through services.	15	Work has begun on piloting GSA's API management tool. In addition, work has been done on developing a API builder that allows the Agency to easily make datasets API enabled.
ChemView (all TSCA Non-CBI)	Give list of chemicals subject to export notification requirements, release new chemical assessments, and consolidate data sources into ChemView.	22	Continue to systematically publish additional chemical data, improved search option. Included 2016 CDR reporting information.
Innovation Team, Citizen Science, Next generation Air monitoring- Village Green Project, Air sensors studies & Air Sensor Toolbox for Citizen Scientists, Real Time Geospatial Data Viewer (RETIGO),	Continue and further efforts to engage citizens in citizen-science projects and collaborations, including air monitoring. Release real time Geospatial Data Viewer.	29	<p>Village Green solar-powered "park benches" provide local communities with real-time measurements of PM and ozone. In cooperation with the Houston Health Department, EPA built a new Village Green station in March 2017, that for the first time also measures black carbon, NO2, and volatile organic compounds.</p> <p>There are numerous air sensors studies underway including:</p> <p>ORD STAR Grants - ORD is funding six research institutions around the US who will be working with communities to advance air monitoring technology, help address unique local air quality challenges and better understand how sensor technologies can be used by communities and individuals to monitor air pollution exposure. The grantees have just completed their first year of research and will be presenting at the International Society of Exposure Science symposium in October, 2017. First year progress reports will be posted in the coming months. Website: https://www.epa.gov/air-research/air-pollution-monitoring-communities-grants</p> <p>Novel VOC Sensor System for Fugitive Emission Detection – A Regional/State Innovation project was awarded to Region 6, supports development and deployment of an innovative, low-cost VOC sensor system. Data generated from this effort will greatly improve our understanding of VOC emission sources in Region 6, which could bring benefits to industry, lower monitoring costs, and better air quality for near source communities.</p>

			<p>Air Sensor Toolbox – The evaluation results for 11 commercially-available air sensors were added to the Toolbox and published in a scientific paper. This information helps sensor purchasers to understand potential performance of sensors that are on the market.</p> <p>Real Time Geospatial Data Viewer (RETIGO) - A free, web-based tool that can be used to explore environmental data that collected either stationary or in motion (e.g., air quality sensors added to a bike). EPA developed and released version 2.0 of this software, making it easier for citizen scientists and others to view and analyze their own environmental data.</p>
Community Grants		39	Hosted three Grants Award Process webinars. The webinars are open to the public and community groups are notified. Attendance at the three webinars totaled 738 attendees. OGD maintains a landing page of resources for communities on our EPA Grants internet site. These resources include EPA community program information and a EPA Grants 101 tutorial.
DATA Act Implementation	Increase financial transparency and improve access to spending data by documenting expenditures and submitting implementation plan to Treasury.	36	OCFO developed the DEAR Reporting tool and successfully transmitted Data Act information to Treasury's Data Broker for Quarters 2 and 3, FY 2017. Data is available for review at USASpending.gov.
Data Analytics Program	Create analytics toolkit, bring important datasets into data platform, and showcase data analytics successes.	20	Deploying Jupyter Notebook/RStudio environment to support analytics in Python/R along with an Apache Spark 2.0 cluster for distributed computing and Big Data analytics. Will be in place by October 2017.
Developers Central	Improve Developer Central functionalities, and enable comments on data in Environmental Dataset Gateway	18	Work has been done to refresh the “look and feel” and improve the organization of content on the Developer Central website, based on user research. In addition, plans are in place to move Developer Central to cloud.gov by September 2017.
Digital Services Strategy/Program	Adopt open source code, tools, and examine repository options.	34	Work has begun to share developer guidance through Developer Central Website to the general public. This is a part of an effort to be more transparent and make coding best practices and guidance available to everyone and not just the Developers' Guild.

ECHO	Release better mobile interface, put criminal/civil data together and improve drinking water search.	54	All tasks completed on echo.epa.gov.
e-Enterprise	Manage project teams integrated with State, federal, and Tribal components; produce a framework for EPA and co-regulators to collaboratively manage identity management; look for ways to make reporting easier.	56	9 of 28 key projects have been completed. Significant accomplishments have been achieved on the remaining 19 projects still in progress. A prototype identity bridge solution is in place at EPA, and through an Exchange Network grant, three states evaluated options for integrating their systems using a common identity solution. EPA and states have efforts to inventory existing reporting efforts to identify areas for leaning and modernization. A prototype electronic reporting platform was explored for fuels and air emissions reporting.
e-Enterprise Portal Project	Release phase one portal that is linked to reporting system, and allows EPA partners to manage information and conduct regulatory business.	56	Released Phase One of the E-Enterprise Portal. Integrated Compliance and Emissions Data Reporting Interface (CEDRI) into three applications. The Local Government Portal (Assistance Gateway) provides resources for EPA and one state. Air Now integrated. In the pre-production environment, two state systems are linked by the identity management bridge and one application hosts information for one state with two additional states adopting the code.
EIMP	Develop a plan to implement the Enterprise Information Management Policy, and develop lifecycle management procedures to help guide standards for releasing data.	7	This work is being accomplished through a number of different Agency systems, rather than as single consolidated plan.
Elastic Search- reg.gov	Research user behavior through analytics, make it easier for users to find regulatory information, and implement API for users.	38	Several SEO updates have been made in order to enhance analytics. Beginning test site – designed to gather public feedback for a modernized application is planned for Q21 2018
e-Manifest	Release e-Manifest	35	Initial release planned for July 2018
Environmental Data Platform	Release prototype.	51	Currently deploying data platform environment and populating datasets. Beta environment by October 2017

Environmental Dataset Gateway (EDG)	Increase number of EPA datasets available through APIs, train data owners how to manage important datasets, improve EDG dashboard, and register uncatalogued datasets	12	EDG datasets have been increased to over 2,400 datasets. These include previously uncatalogued datasets, many of which are accessible through Application Program Interfaces (APIs). EPA's API strategy continues to be developed which will increase the number of APIs in the future. EDG has developed a new metadata editing tool, the EME 5.0, and has completed numerous training sessions on how to create high quality metadata records using this tool. EDG's metadata quality dashboard is under development.
EPA/Federal Geoplatform	Continue deploying shareable maps and applications, including EJSCREEN map; improve integration of Geoplatform capabilities with other tools/platforms; Support integrating geospatial data analytics into EPA's Data Visualization Platform; Enhance E-Enterprise portal with mapping tools.	50	EPA's GeoPlatform continues to support map development and publishing. Geospatial applications, widgets, and data have been updated and deployed. Annual updates to EJSCREEN and NEPAAssist are underway. GeoPlatform data supports visualization and portal displays. MyEnvironment Map microservice has been updated based on E-Enterprise portal display requirements.
EPA's Public Participation Guide	Develop online guide on engaging with EPA decisions, integrate environmental justice tools and concepts into guide, and continue in-classroom training.	47	EPA's Public Participation online Guide and in-classroom training have been updated and enhanced with Environmental Justice (EJ) concepts and resources. Currently, EPA's OITA plans to launch its enhanced Guide and training within the next few months. EPA's OITA has also almost completed the online training it developed that mirrors the in-classroom training, which also includes the EJ concepts and resources. EPA's OITA plans to beta test modules from this online training next month and make final modifications to the online training before the end of the calendar year. EPA's OITA will be conducting a few in-classroom trainings before the end of the calendar year. Since September 2016, EPA's OITA has conducted training in Peru, Colombia, Jamaica, to CAFTA-DR countries, and to EPA's Region 6.
Facility Identification Integrated Project Team	Pilot several facility technical solutions with state and tribal agencies	52	Developed User Stories and Business Rules for sharing facility information in support of E-Enterprise. Completed detailed requirements for state/EPA API for joint data curation with real time updates between EPA and state facility records.
Federal Docket Management System (FDMS 4.11) www.regulations.gov	Continue enabling public to participate in rulemaking by examining site analytics, improving search, and enabling API features if possible.	38	Submitted recommendations to eRulemaking governance on ways to improve Regulations.gov docket searches.

FOIA Program	Develop and release MyProperty tool to decrease number of FOIA requests about real estate; develop new 2016 FOIA regulations; help regional offices and others streamline requests, and continue making all responses to requests available.	42	FOIA Regulations developed and undergoing internal review process. MyProperty deployed in September, 2016, but currently off-line due to a system refresh. FOIA Program continues to provide assistance to regional and EPA program offices. Posting all releasable records through FOIAonline.
FOIA Program/FOIAonline	Continue work on FOIAonline with other agencies.	21	<p>FOIAonline EPA continues to serve as the managing partner of the FOIAonline application—a multi-agency Freedom of Information Act solution that allows the public to make and track FOIA request, search other requests, access responsive records posted by participating agencies, and generate real-time reports, as well create their own FOIA log reports saving agencies time by not having to provide these frequently requested reports to the public. FOIAonline contributed to the success of EPA’s FOIA Program (see section III.D), by offering expanded workflow enhancements that resulted in improved access and quicker responses to public requests.</p> <p>The benefits offered by FOIAonline are becoming more widely known through the federal community. In addition to EPA, FOIAonline services support 16 other federal agencies including: Department of Commerce, United States Department of the Navy, Customs and Border Protection, Pension Benefit Guaranty Corporation, United States Merit Systems Protection Board, Federal Labor Relations Authority, the Office of General Counsel at the National Archives and Records Administration, General Services Administration, Federal Communications Commission, Small Business Administration, the Office of Information Policy of the Department of Justice, Defense Logistics Agency, the Office of Inspector General of the Department of Defense, the Social Security Administration, and the National Labor Relations Board. From these agencies, FOIAonline makes available approximately 551,000 requests for tracking purposes, and provides access to over 920,000 responsive records for discovery and access. FOIAonline also provides agencies with a means to meet their Section 508 accessibility requirements by applying a text layer to certain documents when this is lacking. EPA continues to actively work with agencies who are interested in joining the partnership to meet their FOIA needs.</p>
Facility Registry System (FRS)/Facility Linkage Application (FLA) & Data Model	Begin using new facility data model to better access information about facilities, and continue to meet EPA National Program Office Requirements.	17	Deployed new data model in November 2016; Expanded Facility Widget with sub-facility components in support of an Office of Air and Radiation’s Information Collection Request.

Greenspark	Conduct ideas challenges for EPA employees to share success stories and possibilities regarding sustainability and innovation within the agency.	27	Conducted challenges for EPA employees to share success stories and ideas regarding ways to improve the work and workplace of the agency.
HERO (Health and Environmental Research Online) Website	Write analyses of individual scientific studies, and allow users to collect facts and data from studies available on HERO. (LitScreener, LitExtractor, LitReporter)	32	Deployed systematic review screening for scientific studies in September 2016. Deployed data extraction model and reporting for epidemiological data in November 2016. Imported extracted data from third-party tools. Currently expanding data extraction to new disciplines.
Pesticide Label Matching	Develop, test, and plan new label-matching application (App) for pesticide regulation; integrate with other EPA and State services.	59	The Pesticide Data Accessibility and Label Matching Project released EPA's PLM App version 1.2 on March 2017 to both Apple and Google App stores, and updates were made available to the Web App. FY17 Q2 Beta testing of v1.2 started on May 2017. FY17 Q4 Planning Phase 2 for the Inspector Database.
Laws and Regulation Services (LRS)	Launch tool to model CFR with EPA regulations and allow users to search relevant regulations.	14	Web service now available Integrated LRS into pre-production (beta) E-Enterprise Portal
Linked Open Data	Launch Linked Open Data Service cloud application	30	Linked Data Service launched and in production with Authority to Operate (ATO) on Amazon Web Services
My Property and FOIA online	Develop/release MyProperty 2.0, develop FOIA policies, and decrease FOIA processing time.	42	Deployed MyProperty 2.0 in September 2016; application is currently offline pending a system refresh.
National Environmental Information Exchange Network	Transition Exchange Network Governance model to become part of E-Enterprise for the Environment and integrate CDX reporting into e-Enterprise Portal.	49	Transition completed. Central Data Exchange (CDX) reporting service integration with e-Enterprise Portal under planning and development
Office of Congressional Affairs	Improve Congressional Correspondence Process	44	The Office of Congressional and Intergovernmental Relations (OCIR) has completed the onboarding of most of the national programs offices under the new procedures for processing congressional and gubernatorial correspondence. OCIR is now refining the tools used for

			tracking correspondence and developing baselines to further improve the system and meet the specific needs of each program.
System of Registry Work	Ensure that Source Classification Codes are available and searchable online, improve access to definitions of fields and terms in datasets.	10	Complete
Public Access Plan	Public Access Plan, and enter ORD publications into PubMed.	31	In accordance with EPA's "Plan to Increase Access to the Results of Federally-Funded Scientific Research" EPA has developed a cross-Agency Forum, as well as several work groups, tasked with meeting the milestones set forth in the plan. Phase 1 of the Plan calls for ORD journal articles to be made available through PubMed and datasets to be made available through EDG. Both of these milestones have been met.
Public Access/Envirofacts	Continue operation of Envirofacts, create mapping tool, and take advantage of new tools to modernize site.	16	Envirofacts (EF) has continued operations and maintenance activities to support public access. EF 2.0 is under development to take advantage of new technology to modernize the application and to enable new capabilities within the tool.
Public Affairs Office	Give public avenues to learn about, participate in, and collaborate with the Agency on realizing its mission.	47	EPA's Office of Public Affairs continues to educate and inform the public via website and by posting information to social media channels.
Public Affairs Office (News Room)	Continue public notice activities.	47	EPA's Office of Public Affairs continues to inform the public of the agency's work and activities. During the requested time period EPA put out over 1,000 press releases to inform the public about our work at headquarters and in the regions.

Quality Policy Program	Develop program to audit EPA programs, and ensure that a quality assessment is in place for EPA decisions.	7	CIO 2105.0, Policy and Program Requirements for the Mandatory Agency-wide Quality System, (2000) requires OEI to assess each organization involved with environmental data operations for compliance to the Agency's quality policy and effectiveness of the implemented Quality Management Plans. EQMD plans to conduct at least 4 Quality System Assessments each year. The results of these assessments are used to evaluate the health of the Agency's quality program and determine opportunities for improvement.
Records Program	Develop plan to automate record-keeping of emails and other documents, digitize paper records, and investigate using open-source solutions for record management.	41	EPA investigated the benefits of using NARA's Capstone (role based) approach for managing email. A survey was conducted across the Agency and with coordination with NARA, identified 108 Capstone officials. The appropriate verification form was submitted to NARA along with a records schedule to cover legacy email records. A robust communications plan is being developed to ensure successful implementation. Following contacts to all Programs and Regions, it was determined that nearly all records are already being digitized locally. While open source options have been reviewed, they do not meet the retention requirements as effectively as ECMS, which already has this capability.
Reusable Component Service	Improve API Documentation, add REST APIs to data.gov, and improve support for Local Government Portal, a component of the e-Enterprise Portal.	35	APIs have been standardized, Local Government Portal supported. Also, support for code.gov and api.gov.
Science Data Management	Increase availability of journal article data through Science Hub (phase 2)	9	ScienceHub phase 2 is in production. Datasets supporting conclusions of ORD published peer reviewed journal articles are being cleared and published to EDG.
SharePoint	Establish SharePoint Center of Excellence	41, 50	The SharePoint Center of Excellence procurement was cancelled because EPA's contracting office had to redirect the resources to complete a higher priority procurement. SharePoint development support is expected to be available as part of an Agency-wide Agile development contract which is currently under procurement.
TOX 21	Further enhance ability to find Tox21 data, improve chemistry dashboard, and see data connected with scientific publications.	32	Tox21 data is accessible as bioassay data in the chemistry dashboard and as hyperlinks to the associated analytical QC Data navigable through the external links page . The chemistry dashboard has been expanded in terms of chemical substances (759k to go live in August 2017) and dramatic changes in functionality delivering Toxicity Values, ADME and Exposure Data. Data connected with scientific publications are available via the Downloads Page and directly integrated to the experimental data on the dashboard.

Toxics Release Inventory	Deploy new modernized/streamlined version of TRI-MEweb	17	The new modernized version of TRIMEweb was released on January 4, 2017 in production. This included leveraging FRS and other shared services. A survey was conducted with very positive feedback from users. Additional feedback and comments from users and Help Desk will be used to improve functionality and usability.
TSCA voluntary declassification challenge program (http://www.epa.gov/tscacbi/voluntary-challenge-declassify-confidential-business-information-cbi)	Encourage industry to declassify confidential business information so as to increase public availability of health and safety study data	46	The June 2016 Frank R. Lautenberg Chemical Safety for the 21 st Century Act requires EPA to review and make determinations regarding the validity of TSCA CBI claims based on the criteria in the statute and regulations. The Agency is currently focused on meeting the requirements of the new law, while also continuing to support the effort to encourage industry to declassify confidential business information.
USAspending.Gov	Expand EPA financial data available to the public on USAspending.gov.	39	As a result of Data Act implementation, OCFO developed the DEAR Reporting tool and successfully transmitted Data Act financial information to Treasury's Data Broker for Quarters 2 and 3, FY 2017. This data is available to the public for review at USAspending.gov.
Website Management	Maintain high levels of information quality on website, and integrate information across topic areas.	26	5 new web areas were published since Oct 01,2016. Environmental Topics. FCA (Fiat Chrysler Automobiles) Diesel Vehicle Violations, Energy Independence, Waters of the United States (WOTUS) Rulemaking and Energy Resources for State and Local Governments.
Whistleblower Protection Ombudsman	Give employees information on whistleblower protections through communications and training.	25	The Ombudsperson educated EPA employees (including scientists) about prohibitions on retaliation for protected disclosures as well as rights/remedies for whistleblowers via oral presentations.