

# Increasing Access to the Results of Federally Funded Scientific Research: Data Management and Citation

**Jerry Sheehan**

*Assistant Director for Scientific Data & Information  
White House Office of Science and Technology Policy*

CODATA Workshop on Data Citation & Attribution  
12 July 2016

# OSTP Memorandum - 22 February 2013

EXECUTIVE OFFICE OF THE PRESIDENT  
OFFICE OF SCIENCE AND TECHNOLOGY POLICY  
WASHINGTON, D.C. 20502

February 22, 2013

## MEMORANDUM FOR THE HEADS OF EXECUTIVE DEPARTMENTS AND AGENCIES

FROM:

John P. Holdren  
Director



SUBJECT: Increasing Access to the Results of Federally Funded Scientific Research

### 1. Policy Principles

The Administration is committed to ensuring that, to the greatest extent and with the fewest constraints possible and consistent with law and the objectives set out below, the direct results of federally funded scientific research are made available to and useful for the public, industry, and the scientific community. Such results include peer-reviewed publications and digital data.

Scientific research supported by the Federal Government catalyzes innovative breakthroughs that drive our economy. The results of that research become the grist for new insights and are assets for progress in areas such as health, energy, the environment, agriculture, and national security.

Access to digital data sets resulting from federally funded research allows companies to focus resources and efforts on understanding and exploiting discoveries. For example, open weather

# OSTP Memo: Specified Objectives

## Digital Data

- Maximize free access while
  - Protecting privacy and confidentiality, national security
  - Recognizing intellectual property rights
  - Balancing costs & benefits of long-term preservation
- Require data management plans (DMPs)
- Allow inclusion of costs in applications for funding
- Ensure appropriate evaluation of DMPs
- Monitor compliance by investigators
- Encourage deposit of data in public repositories, where possible
- Cooperate with the private sector
- Develop approaches for data citation & attribution
- Support training, education and workforce development
- Assess long-term needs for preservation and options for repositories

## Scholarly Publications

- Public can read, download, analyze in digital form
- 12-month post-publication embargo as guideline, with stakeholder petitions to change
- Easy public search, analysis of, and access to publications
- Full public access to metadata without charge upon first publication
- Public-private collaboration
- Attribution to authors, journals, and original publishers
- Archival solutions that provide long-term preservation & access without charge
  - Uses widely available, nonproprietary standards/formats
  - Provides access for persons with disabilities (consistent with Section 508 of Rehabilitation Act)
  - Enables integration and interoperability with other Federal archival solutions and other appropriate archives

# Completed Public Access Plans (as of July 2016)

[See <http://www.cendi.gov>]

## Department of Agriculture (Nov 2014)

<http://www.usda.gov/documents/USDA-Public-Access-Implementation-Plan.pdf>

## Department of Defense (Feb 2015)

[http://www.dtic.mil/dtic/pdf/dod\\_public\\_access\\_plan\\_feb2015.pdf](http://www.dtic.mil/dtic/pdf/dod_public_access_plan_feb2015.pdf)

## Department of Energy (Jul 2014)

[http://energy.gov/sites/prod/files/2014/08/f18/DOE\\_Public\\_Access%20Plan\\_FINAL.pdf](http://energy.gov/sites/prod/files/2014/08/f18/DOE_Public_Access%20Plan_FINAL.pdf)

## Department of Health & Human Services

<http://www.hhs.gov/open/public-access-guiding-principles/index.html>

- **Administration for Community Living [Publications]** (Feb 2016)  
<http://www.acl.gov/Programs/NIDILRR/docs/ACL-PublicAccessPlan-Jan2016.pdf>
- **Agency for Health Research & Quality** (Feb 2015)  
<http://www.ahrq.gov/funding/policies/publicaccess/index.html>
- **Assistant Secretary for Preparedness & Response** (Feb 2015)  
<http://www.phe.gov/Preparedness/planning/science/Pages/AccessPlan.aspx>
- **Centers for Disease Control** (Jan 2015)  
[http://www.cdc.gov/od/science/docs/Final-CDC-Public-Access-Plan-Jan-2015\\_508-Compliant.pdf](http://www.cdc.gov/od/science/docs/Final-CDC-Public-Access-Plan-Jan-2015_508-Compliant.pdf)
- **Food & Drug Administration** (Feb 2015)  
<http://www.fda.gov/downloads/ScienceResearch/AboutScienceResearchatFDA/UCM435418.pdf>
- **National Institutes of Health** (Feb 2015)  
<http://grants.nih.gov/grants/NIH-Public-Access-Plan.pdf>

## Department of Transportation (Nov 2015)

<https://www.transportation.gov/open/official-dot-public-access-plan>

## Department of Veterans Affairs (Mar 2015)

[http://www.va.gov/ORO/Docs/Guidance/Plan\\_for\\_Access\\_to\\_Results\\_of\\_VA\\_Funded\\_Rsch\\_02\\_14\\_2014.pdf](http://www.va.gov/ORO/Docs/Guidance/Plan_for_Access_to_Results_of_VA_Funded_Rsch_02_14_2014.pdf)

## National Institute of Standards & Technology (Apr 2015)

<http://www.nist.gov/open/upload/NIST-Plan-for-Public-Access.pdf>

## National Aeronautics and Space Administration (Nov 2014)

[http://science.nasa.gov/media/medialibrary/2014/12/05/NASA\\_Plan\\_for\\_increasing\\_access\\_to\\_results\\_of\\_federally\\_funded\\_research.pdf](http://science.nasa.gov/media/medialibrary/2014/12/05/NASA_Plan_for_increasing_access_to_results_of_federally_funded_research.pdf)

## National Oceanic and Atmospheric Administration (Feb 2015)

[http://docs.lib.noaa.gov/noaa\\_documents/NOAA\\_Research\\_Council/NOAA\\_PAR\\_R\\_Plan\\_v5.04.pdf](http://docs.lib.noaa.gov/noaa_documents/NOAA_Research_Council/NOAA_PAR_R_Plan_v5.04.pdf)

## National Science Foundation (Mar 2015)

<http://www.nsf.gov/pubs/2015/nsf15052/nsf15052.pdf>

## Smithsonian Institution (Aug 2015)

[http://public.media.smithsonianmag.com/file\\_upload\\_plugin/1f143b54-a9f9-4746-bef5-1c76151e3c7a.pdf](http://public.media.smithsonianmag.com/file_upload_plugin/1f143b54-a9f9-4746-bef5-1c76151e3c7a.pdf)

## U.S. Geological Survey (Feb 2016)

[http://www.usgs.gov/quality\\_integrity/open\\_access/default.asp](http://www.usgs.gov/quality_integrity/open_access/default.asp)

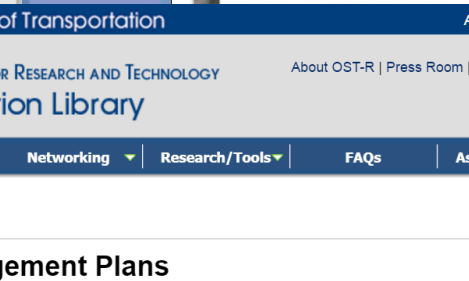
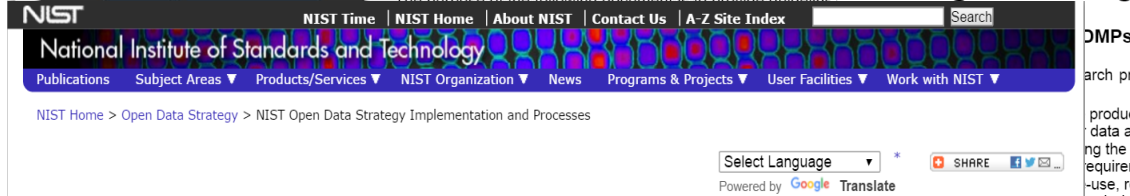
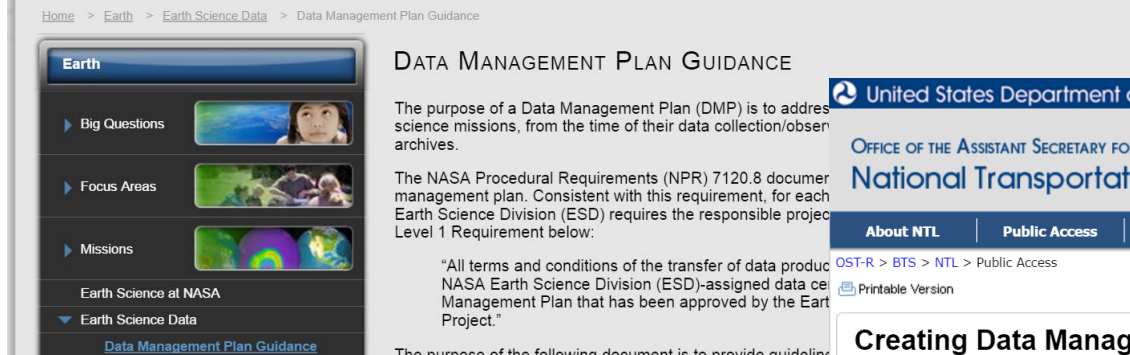
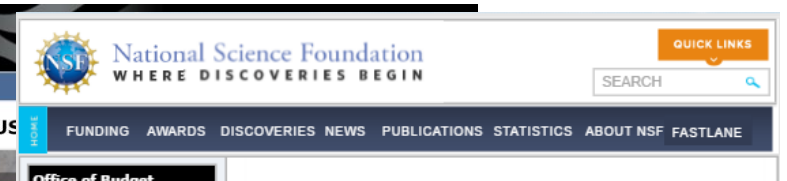
**NOTE:** Institute for Museum & Library Services and Patient-Centered Outcomes Research Institute also have policies for publications access.

# Status of Data Management Plan Requirement

Agency	Intramural	Extramural	Agency	Intramural	Extramural
USDA	TBA	TBA	HHS-FDA	Jan 2016	Oct 2016
DOC-NIST	Oct 2014	Oct 2015	HHS-NIH	DMP – TBD IHSD-Oct 2015 GDS-Sep 2015	DMP – TBD DSP-Oct 2003 GDS-Jan 2015
DOC-NOAA	Jan 2016	June 2016	DOI-USGS	Feb 2015	Oct 2016
DOD	TBA	TBA	DOT	Jan 2016	Jan 2016
ED	[TBA]	IES-Oct 2012	VA	Jan 2016	N/A
DOE	Oct 2015	Oct 2015	NASA	Oct 2015	Oct 2015
HHS-ACL	Oct 2017	Oct 2017	NSF	N/A	Jan 2011
HHL-AHRQ	Public Data	TBA	SI	Oct 2015	Oct 2015
HHS-ASPR	Oct 2015	Oct 2015	USAID	Oct 2014	Oct 2014
HHS-CDC	Feb 2016	Oct 2013/2016			

NOTE: See [www.cendi.gov](http://www.cendi.gov) for additional details

# Data Management Guidance



## NIST Open Data Strategy Implementation and Processes

### NIST's Guiding Principles for Implementation

- Policies, processes, and infrastructure will be flexible enough to accommodate a wide range of scientific disciplines and a diversity of stakeholders, including funded researchers, universities, libraries, publishers, industry, civil society, and any other users of NIST research results.
- Search, archival, and dissemination features of the implementation will be optimized to encourage innovation in accessibility and interoperability while ensuring long-term stewardship of the results of federally funded research.
- Expansion of the types and volume of scientific information produced with NIST funding is anticipated. Extensible and evolvable solutions that can accommodate new needs on an ongoing basis are required. NIST will track and respond to continuing changes in digital technologies when planning to make research results publicly accessible.
- NIST's reputation for high-quality output, willingness to work in partnership, and responsiveness to stakeholders will be promoted and enhanced.

### Implementation of NIST Data Management and Public Access Infrastructure

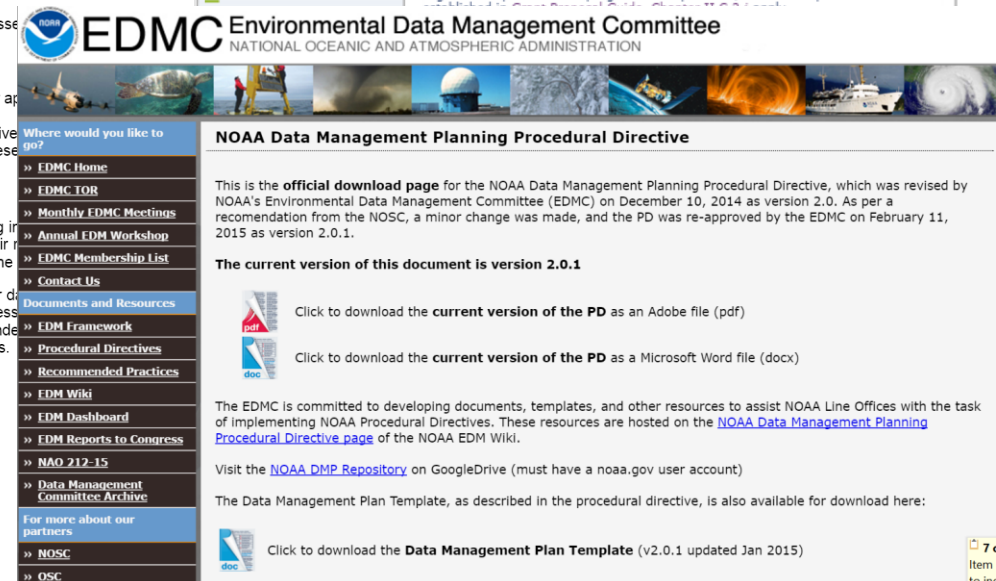
## Creating Data Management Plans

### DMPs) Content Overview

arch proposal conforms to DOT policy on the dissemination of research data and metadata format and content; the final research data, including provisions for access, use, re-distribution, and the production of derivative research data and other research products, and for preservation.

a description of the data that you will be gathering in the project. Describe the characteristics of the data, their uses that may apply. Discuss value of the data over the project lifecycle. You should describe the anticipated formats that your data will be in, and the practices in your field, your DMP should address the data formats in the future. If you are unable to use platform-independent formats, describe the rationale for using those standards and formats.

## Data Citation & Attribution





# Following Future Developments

Public Access Forum: <https://www.whitehouse.gov/administration/eop/ostp/library/publicaccesspolicy>

OSTP Blog: <https://www.whitehouse.gov/blog/2016/02/22/increasing-access-results-federally-funded-science>



## RESOURCE LIBRARY

Documents,  
Speeches, & Reports

Freedom of  
Information Act  
(FOIA)

Scientific Integrity

Testimony

Compliance  
Guidelines

Archives

Public Access Policy

## OSTP Public Access Policy Forum

**UPDATE: April 29, 2016** - On April 29, 2016, OSTP Director John P. Holdren transmitted an update to Congress outlining progress toward the development and implementation of policies to increase public access to the results of federally funded scientific research.

[Read the progress update here.](#)

**UPDATE: January 29, 2016** - On January 29, 2016, OSTP Director John P. Holdren transmitted an update to Congress outlining progress toward the development and implementation of policies to increase public access to the results of federally funded scientific research.

[Read the progress update here.](#)