In 2016, the White House Office of Science and Technology Policy and the Center for Open Data Enterprise co-hosted four Open Data Roundtables to identify case studies, lessons learned, and best practices in open data across the federal government. Open data from government is free, publicly-available data that anyone can use and republish. The Center has summarized key takeaways from these Roundtables which brought together experts from inside and outside of government with technical, policy, and legal backgrounds. The Center will publish a full report of Roundtable findings in fall 2016.

BACKGROUND

On June 15th, 2016, the White House and the Center for Open Data Enterprise co-hosted a Roundtable to address a key issue: How can public-private collaboration support open data? Many healthcare, agriculture, financial services, energy, and transportation companies, among others, use open government data as a key business resource. The private sector and government agencies have a mutual interest in helping to ensure that government data programs are high quality, easily accessible, and cost effective. In addition, open data stakeholders outside of government often have knowledge, expertise, resources, and processes that could benefit government data programs.

The Roundtable brought together 100 experts from government, nonprofits, academia, and the private sector to address public-private collaboration. Participants were not asked to develop consensus recommendations but to share their own observations and suggestions.

GENERAL ISSUES TO ADDRESS AND STRATEGIES

Roundtable participants identified opportunities for public-private collaboration by focusing on four key aspects of open data: access, discovery, ease of use, and quality.

Access to open data:
- Build collaborations with communities of data users.
- Develop data user agreements with terms for data sharing.
- Build trusted industry-hosted data repositories.

Discovery of open data:
- Conduct outreach to publicize the availability of data and where to access it.
- Make data more discoverable through search engines developed by the private sector.
- Develop and publish user stories and use cases connected with datasets to improve discoverability.

**Ease of Use of open data:**
- Provide tutorials on how to use open government datasets.
- Provide user interfaces for government data that can be customized by audience.
- Gather consumer feedback on government data services, and engage users in testing new technical solutions.
- Provide data tools for different communities of government data users.

**Quality of open data:**
- Corroborate accuracy of government datasets through comparison with other data sources.
- Provide private-sector tools for validating data and automated analysis.
- Have the private sector provide infrastructure for data collection and maintenance.
- Provide analytics, visualizations, and user forums to enable high quality data to come to the forefront and facilitate public-private collaboration.
- Collaborate to develop standards for data and metadata.
- Have private-sector organizations serve as a neutral test bed for data integration and interoperability standards.

After identifying these broad needs for collaboration, participants went through an exercise to define more specific opportunities for public-private collaboration, ranging from those in the “wish-list” stage to firm commitments from government, companies, nonprofits, or other stakeholders. They placed post-its with their ideas on “Possibilities Boards” to demonstrate the range of potential collaborations for advancing work on open data. Participants worked on this exercise in four groups based on their expertise: Open Data (general), Climate, Oceans, and Smart Cities.

The general open data possibilities, which could be applied across all domains, included opportunities for organizations both in and outside of government:

- **Federal government:** Develop open source software; provide well documented APIs; enhance use of CKAN; develop data standards.
- **State/local governments:** Develop models for data access that protect sensitive data; create demonstration projects to promote more open data implementation (e.g. fivar.org for food safety).
- **Private sector:** Provide technical assistance; host large government datasets; provide feedback on quality of datasets; make open source contributions to enterprise CKAN.
- **Nonprofit, academics, developers:** Develop a wiki for data improvement; develop open source agreements; create feedback loop to continuously improve data quality.
DOMAIN-SPECIFIC OPPORTUNITIES

In addition to these general recommendations, participants at more subject-specific tables developed a range of opportunities for collaboration around climate, smart cities, and oceans data.

CLIMATE

- **Federal government**: Facilitate and create online services and resources (e.g. Global Geospatial Consortium); engage with the public on Climate Resilience Toolkit; work with international stakeholders to develop an open climate data repository.
- **State/local governments**: Survey users to define needs for improved climate data services.
- **Private sector**: Help improve data quality, specifically improving global weather data for Numerical Weather Prediction; develop consistent APIs to open data; fund partnerships with academia and nonprofits.
- **Nonprofits, academics, developers**: Develop an Open Commons Consortium; apply digital identifiers to tag data so that it can be accessed in the same way even if it is located in different data commons; build on the Ontario Climate Change Symposium, which focused on agriculture to reduce greenhouse gasses; help build user-centric data-driven applications.

SMART CITIES

- **Federal government**: Create more programs and platforms to make federal data applicable at a local level (e.g. CitySDK); develop smart data grid standards; use DOT Smart Cities grant winner, Columbus, Ohio, as a model for engaging small businesses around open data.
- **State/local government**: Build on the USDS eight-state initiative; reduce redundancy in data collection; develop catalogs of sensor network data; develop tools, analytics, visualizations that showcase open data use cases.
- **Private sector**: Integrate streaming with tabular data for comparative analytics; facilitate easier sharing of private-sector data; develop partnerships to scale up individual communities’ programs; help scientific community produce basic information products; organize startup showcase for White House Open Data Summit.
- **Nonprofits, academics, developers**: Identify best practices and lessons learned for publishing data that users can easily discover and understand; promote best practices for web analytics that encourage data use and increase ROI on data investments.

OCEANS

- **Federal government**: Connect experts from oceans sector to marine renewable energy data; support and maintain Quality Assurance for Real Time Ocean Data (QARTOD); support agencies in implementing open data policy; enforce open data and open science policies.
- **State/local governments**: Provide support for Northeast Regional Ocean Data portal; develop citizen engagement initiatives focused on specific topics.
- **Private sector**: Provide expertise in ocean data formats and structures to increase cloud offerings; provide tools to facilitate metadata compliance; develop topical data aggregation platforms; enable cloud computing storage.
• **Nonprofits, academics, developers:** Collect and monitor data about fishing and fisheries; empower coastal communities for climate change resilience with decision support tools (e.g. coastalresilience.org); map marine-protected areas; conduct outreach to ocean science community through professional organizations and conferences; curate datasets for oceans challenges.

**ABOUT THE CENTER FOR OPEN DATA ENTERPRISE**
The Center for Open Data Enterprise is an independent nonprofit 501(c)(3) organization, based in Washington, DC., whose mission is to maximize the value of open government data as a public resource, by focusing on data users. We thank our Open Data Partner Microsoft and Open Data Supporter Booz Allen Hamilton for supporting the Center’s work on the Open Data Roundtables. We welcome feedback on this report. Please send comments and inquiries to Katherine Garcia, Director of Communications and Outreach, at katherine@odenterprise.org.