

CROWDSOURCING, CITIZEN SCIENCE, AND THE LAW: LEGAL ISSUES AFFECTING FEDERAL AGENCIES

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By Robert Gellman



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Crowdsourcing, Citizen Science, and the Law: Legal Issues Affecting Federal Agencies

Policy Series, Volume 3

The purpose of this report is to review legal and regulatory issues that federal agencies face when they engage in citizen science and crowdsourcing activities. This report identifies relevant issues that most federal agencies must consider, reviews the legal standards, suggests ways that agencies can comply with or lawfully evade requirements, and discusses practical approaches that can ease the path for federal citizen science and crowdsourcing projects, including procedural activities, cooperative actions, legislative changes, and regulatory adjustments.

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Crowdsourcing, Citizen Science, and the Law: Legal Issues Affecting Federal Agencies

Executive Summary

The purpose of this report is to review legal and regulatory issues that federal agencies face when they engage in citizen science and crowdsourcing activities. The report identifies relevant issues that most federal agencies must consider, reviews the legal standards, suggests ways that agencies can comply with or lawfully evade requirements, and discusses practical approaches that can ease the path for federal citizen science and crowdsourcing projects, including procedural activities, cooperative actions, legislative changes, and regulatory adjustments.

Introduction

Citizen science is a form of open collaboration in which members of the public participate in scientific research to meet real world goals. **Crowdsourcing** is a process by which individuals or organizations solicit contributions from a large group of individuals or a group of trusted individuals or experts. These definitions, like the field and the basic terminology itself, are evolving rapidly in multiple arenas. In this report, it will be simpler and more efficient to use one term—crowdsourcing—to refer to both crowdsourcing and citizen science

Federal crowdsourcing activities are remarkably diverse and creative. Some of the credit for this belongs to the Internet, which changed how agencies function in much the same way that it changed how individuals and organizations function. More of the credit belongs to dedicated federal employees who recognized that there were new ways to accomplish their missions. Some credit also belongs to agency management for supporting creativity and innovation.

The federal government operates under certain laws, rules, and policies that differ in significant ways from those that apply to any other institution. Federal agencies must comply with constitutional principles, statutory obligations, regulatory processes, and administrative policies. When new federal activities like crowdsourcing meet rapidly changing technologies, initially unrecognized legal issues may arise that lack precedent and therefore require agency lawyers to scramble to keep up with developments.

These factors may explain, in part, the apparent perception in the federal crowdsourcing community that some policies reflected in federal law unfairly target them, or that the rules were not intended to cover their activities. However, the laws that affect crowdsourcing also affect numerous other federal activities.

This report explains the laws applicable to crowdsourcing and provides general guidance about how to comply with or lawfully avoid application of those laws. While some legal and administrative requirements applicable to crowdsourcing activities may be time consuming or cumbersome, none are an insurmountable barrier. The most practical advice derived from discussions with government employees who lived through compliance with various laws is to “embrace the bureaucracy.”

The Commons Lab within the Science and Technology Innovation Program at the Woodrow Wilson International Center for Scholars has been a leader in facilitating effective and efficient adoption of crowdsourcing. The Commons Lab has commissioned a series of reports, including this one that describe various crowdsourcing activities, and discuss the value and future of crowdsourcing.

Paperwork Reduction Act

The Paperwork Reduction Act of 1980 (PRA) regulates federal agency activities that involve the collection of information from more than 10 persons. The goals of the law are to provide for better management of information resources, minimize burden on the public, avoid duplication, and assure the practical utility of collected information. A broader goal of the PRA was to create a new government-wide organizational and policy framework to manage government information resources. The PRA is a principled law seeking to improve management and efficiency in the federal government.

The PRA applies to many crowdsourcing activities. When the law applies, a federal agency must develop a formal information collection request, publish its plans in the Federal Register, consider public comments, publish a second Federal Register notice, and ask the Office of Management and Budget (OMB) for approval.

The PRA determines the process by which an agency obtains OMB approval for information collection, and OMB issues a rule with additional details and specifications. The clearance process has five basic steps:

1. An agency seeking to collect information from 10 or more individuals develops the information collection request in accordance with the requirements of the rule and obtains agency approval from the agency's chief information officer (CIO).
2. The agency publishes a notice in the Federal Register giving the public 60 days to comment on the proposed information collection.
3. The agency evaluates the public comments.
4. The agency publishes in the Federal Register a second notice announcing the sending of the collection proposal to OMB for approval and inviting the public to submit comments to OMB within 30 days.
5. The agency submits its proposal for information collection to OMB concurrent with the publication of the second Federal Register notice. OMB then has 30 additional days from the end of the comment period (or 60 days in total) to take action on the proposal.

These linear steps belie the complexity of the process. The notion of an information collection request is broader than the words imply. OMB wrote the rule expansively to cover activities that go beyond simple reporting to an agency: Asking the public to provide any information—

whether on paper, through a website, or via a mobile app—can constitute an information collection request.

In general, the rules governing the collection of information apply broadly to government collection activities, and the definitions in the rule are comprehensive. While there are some excluded activities, it is difficult to find “loopholes” that allow crowdsourced data collection to fall outside the PRA.

It is difficult to offer any clear timeline for the clearance of a PRA information collection request. **The steps in the process are clear, but the variable time for several steps is largely within the control of the agency.** An estimate of six to nine months overall may be a rough rule of thumb, but longer turnaround times are possible.

From time to time, OMB publishes additional advice and new procedures for agencies to use in developing and clearing information collection requests. Recent OMB PRA publications address the use of social media and web-based interactive technologies; offer additional guidance on web-based interactive technologies that expands upon the list of examples provided in the first social media guidance memo, such as web-based data search tools and calculators; establish policies for generic clearances of information collection requests for methodological testing, customer satisfaction surveys, focus groups, contests, and website satisfaction surveys; and create a fast-track process allowing agencies to obtain timely feedback on service delivery.

While the new procedures may not have direct application to many crowdsourced information collections, **the willingness of OMB to find ways to adapt its procedures to new collection techniques or circumstances suggests that a well-founded request for a memo on approaches to clearing crowdsourced collections might receive a favorable reception.** It seems less likely that OMB would show enthusiasm for a broad crowdsourcing exemption from PRA information clearance requirements.

In December 2010, OMB offered guidance on facilitating scientific research by streamlining the PRA information clearance process. The memo first explains how existing rules may and may not apply to some scientific endeavors. A second part explains PRA procedures, including generic clearances. The third part of the memo emphasizes the value of early collaboration with OMB, including seeking guidance on survey and statistical information collections. Most important for crowdsourcing is OMB’s willingness to consider scientific research under the generic clearance process.

Strategies for Progress

1. It is not inconceivable that the PRA law or rules could change to accommodate or exempt crowdsourcing in some major way. However, OMB has not shown much willingness over the years to significantly change information clearance procedures.

2. The PRA information clearance process is not insurmountable or pointless. Advice from more than one experienced navigator of OMB clearance boils down to this: “embrace the bureaucracy.” This advice comes in part from the recognition that the information clearance process is mostly unavoidable, so there is no point in seeking to evade or deny it.

3. Agencies that engage in crowdsourcing activities, even on an occasional basis, could benefit from collectively accepting OMB’s invitation to work together. Ideas for collaboration include defining useful classes or categories of crowdsourcing; standardizing collection plans and protocols to the extent possible; looking for flexibility for minor variations in scope or practice; or consulting with OMB’s Statistical and Science Policy Office for standard approaches.

4. Agencies that engage in crowdsourcing can do more on their own to navigate the PRA clearance process. Sharing documents and expertise should be a major priority, both within agencies and across agencies. For example, estimating the burden of a request is complex and often novel, so learning from others will make this task simpler. Sharing information on navigating the agency clearance process, preparing Federal Register notices, and obtaining OMB approval would also be helpful. A crowdsourcing support organization is another possibility.

5. The Office of Science and Technology Policy might take on the task of convening crowdsourcing enthusiasts in agencies to make the case to OMB.

Information Quality Act

The Information Quality Act (IQA) seeks to ensure and maximize the quality, objectivity, utility, and integrity of information that federal agencies disseminate to the public. Each agency has its own information quality guidelines. Because OMB guidance limits application of the IQA to the dissemination of information that has a clear and substantial impact on important public policies or important private sector decisions, the IQA’s application to many crowdsourcing projects may be small.

As part of information resources management, OMB instructs agencies to develop a process for reviewing the quality (including the objectivity, utility, and integrity) of information before dissemination. OMB also directs agencies to establish administrative mechanisms allowing affected persons to seek and obtain, when appropriate, timely correction of information that does not meet applicable guidelines.

Some agency personnel may perceive the IQA as another overarching barrier not easily overcome. This perception may not always match the reality. Still, with information dissemination that contributes to regulatory action, the IQA is more likely to be relevant, although to date many crowdsourcing activities have no regulatory implications. Further, the problem of data quality in crowdsourcing is already well known, and those who design and operate crowdsourcing activities seek ways of addressing quality issues as part of the programs’

design. The standards in the law may still apply, but those standards may be lower or no different than those applied by crowdsourcing sponsors to themselves. Because OMB directs agencies to weigh the costs and the benefits of higher information quality in the development of information, the consequences of the IQA, even when it applies to crowdsourcing, may be limited.

Strategies for Progress

1. Changes to the IQA or its rules seem unlikely. Obtaining additional guidance from OMB might be possible if a case could be made for it, but it is not clear that the IQA is a real barrier to crowdsourcing.
2. It would be helpful if agency personnel involved with crowdsourcing had a better understanding of the specific requirements and limited application of the IQA. It would help if more people understood that the IQA is not likely to present a significant barrier to crowdsourcing activities that are unlikely to lead to controversial regulatory activities.

Antideficiency Act

The Antideficiency Act seeks to control federal spending by limiting the ability of agencies to create financial obligations in excess or in advance of appropriations. For example, the Antideficiency Act restricts the ability of agencies to use volunteers, although some agencies have general authority to accept gifts of services. In general, agencies that respect congressional appropriation controls and meet procedural requirements can likely carry out most, if not all, crowdsourcing activities.

The restriction against accepting volunteered services is not quite as broad as it might appear on first reading. Acceptance of services without compensation is not impossible, although questions still remain about the limits. A well-planned, narrowly-defined crowdsourcing activity that includes a written waiver of compensation signed by the volunteers seems unlikely to violate the Antideficiency Act.

Strategies for Progress

1. Many agencies already have authority to accept gifts, including gifts of services. Anyone in an agency considering a crowdsourcing activity should be able to obtain a definitive answer about the agency's existing authority from the agency's general counsel.
2. Some of the uncertainties about the application of the Antideficiency Act might disappear if an agency or congressional committee formally asked the Government Accountability Office (GAO) specific questions about a planned crowdsourcing project.
3. It seems unlikely that Congress would directly amend the Antideficiency Act on behalf of crowdsourcing. However, from time to time over the years, Congress

has passed legislation relaxing some of the standards in the Antideficiency Act for particular agencies or activities. Granting agencies broad authority to accept gifts of services has not proved controversial in the past.

Privacy and Information Policy

Federal information management laws affect crowdsourcing activities in much the same way as they affect other federal agency operations. Not all crowdsourcing activities collect personal information or raise privacy issues, but privacy can present unexpected challenges in some cases. Even collecting minimal information about volunteers participating in crowdsourcing may create privacy obligations for federal agencies under various statutes. Many agencies have privacy offices, privacy officers, or other privacy resources that may be available to help identify legal obligations, carry out privacy requirements, and generally do the right thing to protect the privacy of personal information.

Privacy obligations for federal agencies are likely to present few substantive limitations in a crowdsourcing context, but there are several relevant laws and different publication and evaluation requirements to meet. Complying with privacy law generally means satisfying procedural requirements that are mostly within the control of the agency.

The **E-Government Act of 2002** requires agencies to conduct privacy impact assessments (PIAs) before creating new privacy risks. The requirement attaches when an agency develops or procures information technology systems that collect, maintain, or disseminate information in identifiable form from or about members of the public, or when it initiates, consistent with the PRA, a new electronic collection of information in identifiable form for 10 or more persons.

The requirement for a PIA is likely to apply to any crowdsourcing activity that requires an information clearance request under the PRA *and* that collects any personally identifiable information. Each agency conducts its own PIAs, and they are not submitted to or approved by OMB. If, as seems likely with crowdsourcing, information collection does not create a “major” information system, an extensive PIA is not required.

The **Privacy Act of 1974** is a privacy law applicable to all federal agencies. The Act broadly implements fair information practices, which are general principles for the protection of the privacy of personal information. The primary challenge for crowdsourcing is determining whether an activity creates a “system of records,” which triggers a series of specific obligations. A system of records is a group of records controlled by an agency “from which information *is retrieved* by the name of the individual or by some identifying number, symbol, or other identifying particular assigned to the individual.” Because technology has made the retrievability standard largely meaningless, agencies should assess retrievability in good faith based on expected and actual use of records.

There are three general classes of individuals whose personal information might be part of federal agency crowdsourcing and might result in the creation of a system of records. First, volunteers who participate in the crowdsourcing activity. Second, individuals who are not participants in the activity. Third, agency employees participating in the activity.

If the Privacy Act of 1974 applies, a set of procedural and publishing requirements attaches to an activity. An agency must describe in the Federal Register each system of records in a *system of records notice*, commonly called a SORN. An agency must also send a notice of a new or substantially changed system of records to OMB and to Congress. Writing a SORN might appear a daunting activity, but many of the elements tend to be the same in most SORNs within an agency. A SORN will use much of the same information for preparing for compliance as would be used during the clearance process of the Paperwork Reduction Act. Other elements can usually be readily copied or adapted from other agency SORNs.

For those not versed in the Privacy Act of 1974, writing the routine uses is the hardest part. A *routine use* is a term of art describing the disclosure of a record outside the agency that maintains the system of records. Routine uses tend to be standard within an agency and even, to a certain extent, across agencies.

For a new (or significantly changed) system of records, the agency must publish a SORN in the Federal Register. New routine uses also require a Federal Register publication. An agency must ask for and consider public comments, but the Privacy Act of 1974 does not require the more elaborate notice-and-comment process called for under the Administrative Procedure Act.

The **Children’s Online Privacy Protection Act of 1998** (COPPA) regulates the collection, maintenance, use, and disclosure of individually identifiable personal information obtained online from children under the age of 13. Nominally, COPPA does not apply to federal websites. However, it is a matter of OMB policy that all federal websites must comply with COPPA standards when collecting personal information online at websites directed to children. While it is unlikely that most crowdsourcing activities would collect information from children, an activity conducted in association with a scout troop or school could result in the online collection of personal information from children.

The **Family Educational Rights and Privacy Act** (FERPA) establishes privacy rules for schools and universities that receive federal funds through the Department of Education. The law covers *education records* that contain information directly related to a student. FERPA establishes rules governing the collection, use, disclosure, access, and correction of such information. Unless a federal agency operates a school, FERPA does not apply to the agency. However, if an agency works cooperatively with a school or university on a crowdsourcing activity, the agency may run into FERPA issues. An agency working with a school may be able to avoid most privacy obligations by allowing the school to maintain all personally identifiable student records and by maintaining only non-identifiable program records.

The federal health care privacy rules issued under the authority of the **Health Insurance Portability and Accountability Act** (HIPAA) have little relevance to most federal crowdsourcing activities. For the most part, HIPAA privacy rules apply directly to covered entities, generally health care providers, health plans, and their business associates. Even if a crowdsourcing activity collects health information about individuals, HIPAA will not apply unless the agency otherwise qualifies as a provider or plan. It is possible, however, that a federal agency covered by HIPAA will engage in crowdsourcing.

In 2007, OMB ordered agencies to develop a policy for safeguarding personally identifiable information (PII) and for responding to a **security breach** of that information. By now, each agency should have a security breach response policy in place. For any crowdsourcing activity that collects and maintains PII, the possibility exists that a security breach may expose personal information to unauthorized individuals. Responding to a security breach can be a difficult and expensive undertaking that requires much effort to be completed quickly.

Most other countries around the world have **national privacy laws** broadly applicable to government and private sector record keepers. Privacy laws in other countries generally have little direct relevance to federal agency activities. In a crowdsourcing context, a privacy law in another country may need to be considered if a federal agency undertaking an activity involving the collection of personal information solicits participation by individuals living abroad.

Both the **Federal Records Act** and the **Freedom of Information Act (FOIA)** have rules that may affect the collection, dissemination, and destruction of federal crowdsourcing records. There are no special provisions in either law about crowdsourcing, but the laws affect crowdsourcing records in the same way as they apply to other federal agency records.

The Federal Records Act requires that each federal agency make and preserve records that (1) document the organization, functions, policies, decisions, procedures, and essential transactions of the agency and (2) furnish the information necessary to protect the legal and financial rights of the government and of persons directly affected by the agency's activities. Most noteworthy here is the provision requiring each agency to obtain the approval of the Archivist of the United States before disposing of agency records.

Among other things, the Freedom of Information Act requires each federal agency to respond to requests for copies of federal records. An agency can withhold a record on various grounds, including privacy. A crowdsourcing record might fall under the FOIA's privacy exemption to the extent that it reflects personal information about a volunteer or agency employee. Other FOIA exemptions are less likely to apply.

Like the Federal Records Act, the FOIA is a "housekeeping" law applicable broadly to all federal programs. Any federal program may become the subject of a FOIA request, and a program might give some mild consideration to organizing its records in a way that would simplify a response to a request. Each agency has a FOIA officer to help with compliance.

Strategies for Progress

1. Those who have written Privacy Impact Assessments and Privacy Act of 1974 Systems of Records Notices can educate others about the requirements. Sharing completed documents within and among agencies is also valuable. One way that some agencies might simplify compliance with the Privacy Act of 1974 is by defining one system of records that covers all crowdsourcing activities generically.

2. Every agency has a Privacy Act officer who has experience with the law and the policy surrounding the use of personal information. The Privacy Act officer should be called immediately whenever there is even a hint of a privacy issue.

Terms of Service for Mobile Apps

When federal agencies develop mobile applications for use by those engaged in crowdsourcing, they typically use online facilities and services that operate under terms of service (TOS) established by private companies, such as Google for Android devices and Apple for iPhones. Federal law may not allow agencies to accept these standard TOS. Agencies and service providers have been working together to develop terms of service that federal agencies can accept.

In a crowdsourcing context, mobile applications developed by or for federal agencies offer an excellent example of the potential legal issues. A mobile app is a computer program designed to run on a smartphone or other device. When an agency develops a mobile app, it is likely to act as other developers do. When the app is ready for public release, the agency commonly distributes it through the app distribution platform operated by the owner of the mobile operating system. Each distribution platform operates under its own TOS, licensing rules, and other policies. App developers accept the terms of the platforms that they use, and there is typically little opportunity for negotiation or alteration of the standard TOS.

For an agency operating under the restrictions of federal law, the standard terms for app distribution create conflicts with the law and with federal policy. One example is the requirement that an app developer pay any legal costs that the platform incurs due to distribution of the app. The problem for a federal agency is that an indemnification agreement violates the Antideficiency Act if the agreement, without statutory authorization, imposes on the United States an open-ended, potentially unrestricted liability. A choice of law provision and a requirement for arbitration are other examples of TOS that may conflict with federal law.

There are solutions to TOS conflicts and helpful resources already available. For agencies wishing to implement crowdsourcing through a mobile application, the problems are real, but they are surmountable with effort and cooperation from inside and outside the government.

Strategies for Progress

1. Once a platform agrees to new TOS with one agency, the next agency may be able to use that same solution or find another one faster. Some vendors now publish standard TOS just for federal agencies, and this allows other agencies to accept those federal TOS without additional negotiations or effort. The General Services Administration (GSA) maintains a list of federal-compatible terms of service agreements online.

2. While TOS for federal agencies is a rapidly developing area of law, GSA and agency lawyers are working together to sort it out. Already available resources solve some problems, and more solutions are likely. The Federal Acquisition Regulation has already been adjusted once, and further changes are to be expected.

3. The rapidity of change with the Internet and technology presents multidimensional challenges that are likely to require additional attention in the future. One resource for helping agencies to find and address these challenges is the Social Media Community of Practice, which brings together more than 500 federal social media managers. There may be a need for further cooperation specifically among agency lawyers, perhaps under the auspices of the GSA.

Protection of Human Subjects

The Common Rule issued by numerous federal agencies regulates the conduct of research activities with the goal of protecting human research subjects. In some cases, crowdsourcing activities will qualify as human subjects research. In other cases, it may not be clear whether an activity qualifies.

The Common Rule has two basic requirements for most federally funded crowdsourced research on human subjects: Subjects must give legally effective informed consent, and an institutional review board (IRB) must review the research. All federal agencies are likely to operate their own IRBs. Satisfying an IRB that a research project meets these standards takes time, effort, and paperwork. However, not every project needs to go through the full formal approval process. An expedited process allows for approval for projects that involve minimal risk.

Strategies for Progress

1. A federal employee contemplating a crowdsourcing activity will want to determine as early as possible if the activity presents a human subject protection issue. To determine if the Common Rule applies to a federal crowdsourcing activity, an informal discussion with the chair of the relevant IRB may be the best starting point. The chair should be able to advise whether the Rule applies and whether the activity is likely to meet the minimal risk standard so that it qualifies for expedited review.

2. For federal agencies, the relationship between crowdsourcing and the Common Rule may need a clearer delineation. A clearer policy would also benefit IRBs that may not know how to characterize crowdsourcing activities. The federal crowdsourcing community might ask the Office for Human Research Protections (OHRP), the office primarily responsible for the Common Rule, for assistance. Before approaching OHRP, however, the community would do well to examine the subject so that it can suggest distinctions between activities or classes of crowdsourcing that would be useful in developing specific guidance.

Last Word

Any organization, whether a business, university, scientific organization, state government, or federal agency, operates under both internal and external constraints and rules. Crowdsourcing and citizen science—both rapidly developing methods for accomplishing functions that would be impossible or difficult otherwise—push against existing constraints by using nontraditional sources and methods. Many of the laws that affect crowdsourcing and citizen science by federal agencies also affect numerous other agency functions. It is entirely possible today for federal agencies to engage in crowdsourcing and citizen science despite existing constraints.

Crowdsourcing and citizen science are relatively new activities, and it will take time for the laws and rules that broadly regulate federal agency activities to adapt. As with so many other endeavors, creativity, cooperation, persistence, and patience are needed to achieve better and more efficient outcomes and processes that meet ongoing need. This report includes ideas and suggestions intended to help federal agencies engaged in crowdsourcing and citizen science to find ways through bureaucratic and legal barriers and to explore how rules and laws might change to meet their evolving needs.

Introduction

The introduction considers the definition of citizen science and crowdsourcing, provides an overview of federal crowdsourcing activities, and offers context for the work of the Commons Lab within the Science and Technology Innovation Program at the Woodrow Wilson International Center for Scholars.

I. Definitions

An appropriate starting point is with a definition of citizen science and crowdsourcing. For this report, the Woodrow Wilson International Center for Scholars specified the following definitions for citizen science and crowdsourcing:

Citizen science is a form of open collaboration where members of the public participate in scientific research to meet real world goals. The value of citizen science for producing scientific data and educating volunteers is well established. Citizen science is also considered a paradigm where the needs and activities of an engaged public are intertwined with professional scientific research. Related terms include public participation in scientific research, volunteer monitoring, crowdsourced science, democratized science, and participatory action research.

Crowdsourcing is a process where individuals or organizations solicit contributions from a large group of unknown individuals (“the crowd”) or, in some cases, a bounded group of trusted individuals or experts. Contributors to crowdsourcing projects may or may not be domain experts and may or may not be paid for their efforts. Crowdsourcing often occurs online and employs a piecemeal approach where different individuals contribute small portions to a final project or product (“microtasking”).¹

The Federal Community of Practice for Crowdsourcing and Citizen Science (FCP-CCS) offers its own definitions for these two terms, as well as definitions for broader terms and for activities that fall within the same space as citizen science and crowdsourcing:

Open innovation is a paradigm that suggests that organizations can and should solicit contributions from external volunteers.

Citizen science is a form of open collaboration where members of the public participate in the scientific process in ways that include identifying research questions, collecting and analyzing data, interpreting results, and/or problem solving.

¹ Issues relating to intellectual property and to the use of prizes and challenges are outside the scope of this report. See Teresa Scassa and Haewon Chung, *Typology of Citizen Science Projects from an Intellectual Property Perspective: Invention and Authorship Between Researchers and Participants*. (Commons Lab, Woodrow Wilson International Center for Scholars, 2015), <http://www.wilsoncenter.org/publication/typology-citizen-science-projects-intellectual-property-perspective>.

Crowdsourcing is a process where individuals or organizations submit an open call for voluntary contributions from a large group of unknown individuals (“the crowd”) or, in some cases, a bounded group of trusted individuals or experts.

Crowdmapping is a process where individuals or organizations submit an open call for geographic information or information with an associated geographic location from volunteers to produce collaborative maps.

Do-it-yourself (DIY) / making is a method of creating, modifying, or repairing something without the aid of professional experts.²

A slightly different definition on crowdsourcing, with a broader focus that encompasses commercial activities, comes from Jeff Howe, who originally proposed the term in a 2006 article for *Wired* magazine:

Crowdsourcing is the act of taking a job traditionally performed by a designated agent (usually an employee) and outsourcing it to an undefined, generally large group of people in the form of an open call.³

Because federal agencies do not engage in commercial activities, the commercial aspects of crowdsourcing are less relevant here, although some agencies work with private companies to encourage crowdsourcing.

In the context of federal activities addressed in this report, the Woodrow Wilson Center’s definitions are workable, with the understanding that the terminology and the meaning of the terminology are far from static. The Federal Community of Practice’s website calls its definitions *guidelines* and acknowledges that the terms overlap. In fact, those definitions changed during the course of drafting this report. Distinctions might be made between passive and active operations and between activities carried out by amateurs and by professional scientists. Agencies that operate in different disciplines may develop their own categories for or make distinctions between different types of crowdsourcing.

It is apparent from discussions with those already engaged in these activities that the definitions—and perhaps even the basic terminology itself—will continue to evolve. Citizen science and crowdsourcing are developing rapidly in multiple places. Additional distinctions, refinements, categories, and subcategories will emerge over time, and different paths may appear for different flavors of activities.⁴

For present purposes, there is no need to dwell on definitional borders or attempt to restrict the scope of this inquiry into citizen science and crowdsourcing activities. At present, the federal

² Environmental Protection Agency, *Federal Community of Practice for Crowdsourcing and Citizen Science*, <http://www2.epa.gov/innovation/federal-community-practice-crowdsourcing-and-citizen-science>

³ Jeff Howe, *The Rise of Crowdsourcing*, *Wired* (2006), http://archive.wired.com/wired/archive/14.06/crowds_pr.html. The quoted definition comes from Howe’s website, <http://www.crowdsourcing.com/>.

⁴ See, e.g., Andrea Wiggins & Kevin Crowston, *From Conservation to Crowdsourcing: A Typology of Citizen Science* (2011), <http://crowston.syr.edu/sites/crowston.syr.edu/files/hicss-44.pdf>.

legal background in this area should be the same for most, if not all, activities relating to crowdsourcing, citizen science, or similar efforts. As with much else relating to citizen science and crowdsourcing, legal conclusions about the scope of applicable law and policy may also change over time and require revisiting. Laws are always subject to change, and it is foreseeable that some existing difficulties might be simplified through legislative or regulatory adjustments.

For the purposes of this report, it will be simpler and more efficient to use one term to refer to both crowdsourcing and citizen science as defined by the Woodrow Wilson Center. That term is simply *crowdsourcing*, which covers crowd-based activities whether for a scientific, research, health, or other purpose. This usage is solely for convenience and should not be read as suggesting any attempt at categorization or definition.

II. Overview of Federal Crowdsourcing Activities

The diversity and creativity of federal crowdsourcing activities is remarkable. Some of the credit for this belongs to the Internet, which changed how agencies function in much the same way that it changed how individuals and organizations function. More of the credit belongs to dedicated federal employees who recognized that there were new ways to accomplish their missions and who undertook the efforts required to navigate the bureaucratic and legal barriers that often make new activities so difficult. Some credit also belongs to agency management for supporting creativity and innovation.

To better understand the legal issues that affect federal crowdsourcing activities, it is helpful to know at least a bit about the actual uses and successes of crowdsourcing. These brief descriptions of selected projects provide a sample of federal crowdsourcing:

USGS and Citizen Seismology. One of the many missions of the US Geological Survey (USGS) is the monitoring of earthquakes. USGS uses crowdsourcing through the Internet to supplement its traditional earthquake monitoring instruments. The USGS *Did You Feel It* program asks people who experience an earthquake to go online and share information about the earthquake's effects. The reports help create a map of shaking intensities and damage. The resulting "Community Internet Intensity Maps" contribute toward the assessment of the scope and severity of an earthquake emergency and help define an appropriate response. The maps also provide valuable data for earthquake research.⁵

NASA's Disk Detective. The National Aeronautics and Space Administration (NASA) sponsors Disk Detective, a crowdsourcing project designed to aid the search for potential debris disks and protoplanetary disks surrounding young stars. The project augments traditional disk hunting techniques used by scientists. The software that reviews the videos produced by ground-based telescopes cannot

⁵ Jason C. Young, David J. Wald, Paul S. Earle, & Lea A. Shanley, *Transforming Earthquake Detection and Science Through Citizen Seismology* (Commons Lab, Science and Technology Innovation Program, Woodrow Wilson International Center for Scholars, 2013), <http://www.wilsoncenter.org/publication/transforming-earthquake-detection-and-science-through-citizen-seismology>. See also US Geological Survey, *DYFI Background - The Science Behind the Maps*, <http://earthquake.usgs.gov/research/dyfi/>.

distinguish dust-rich disks from other infrared-bright sources such as galaxies, interstellar dust clouds, and asteroids. The only way to evaluate the sources accurately is to inspect each object by eye. Volunteers sift through the data by viewing 10-second videos of each object, looking to spot background galaxies and asteroids that computers cannot.

EPA's Air Sensor Toolbox. The Environmental Protection Agency's (EPA) Air Sensor Toolbox for Citizen Scientists provides information and guidance on new low-cost compact technologies for measuring air quality. The Air Sensor Toolbox resources include information about sampling methodologies, generalized calibration/validation approaches, measurement methods options, data interpretation guidelines, education and outreach, and low-cost sensor performance information. A major purpose of these resources is to provide guidance and instructions to citizens to allow them to effectively collect, analyze, interpret, and communicate air quality data in their own communities.⁶

NARA and the Citizen Archivist. The National Archives and Records Administration (NARA) asks volunteers to help tag and transcribe NARA records so that the records are more useful to others. In one specific program operated in partnership with the National Oceanic and Atmospheric Administration, citizen archivists transcribe digitized historic Navy, Coast Guard, and Revenue Cutter ship logs from the pre-Civil War period through World War II. The transcriptions turn old records into a more usable format that helps scientists recover older weather observations, contributes to climate model projections, and improves knowledge of environmental conditions.⁷

BLM's Site Steward Programs. Supported by the Bureau of Land Management (BLM), Site Stewards keep an eye on archaeological sites in danger of vandalism or natural deterioration. Volunteers monitor conditions of the resources and report to a professional archaeologist with jurisdiction over the site. They use observations, field notes, drawings, and photography to record changes over time. By detecting changes early on, problems can be addressed more efficiently. Site Stewards also assist in surveying, mapping, and other activities related to cultural resources. Site Steward volunteers are active in at least eight states across the western United States, as well as in some eastern states. State historic preservation offices, archeology groups, and other organizations sponsor Site Steward programs.⁸

⁶ Environmental Protection Agency, *EPA's Air Sensor Toolbox for Citizen Scientists*, <http://www.epa.gov/heads/airsensortoolbox/>. The EPA loans air quality sensors to communities so they can autonomously collect data. The current goal is education and awareness rather than data collection for policy-making purposes.

⁷ National Archives and Records Administration, *Transcribe Old Weather*, <http://www.archives.gov/citizen-archivist/old-weather/>.

⁸ Bureau of Land Management, *The Site Steward Program*, http://www.blm.gov/wo/st/en/res/Volunteer/stewardship/site_stewards.html#STEW.

NPS and Mercury in Dragonfly Larvae. The National Parks Service (NPS) engages students and visitors in national parks to collect dragonfly larvae from distinct sampling sites. The samples then go to laboratories for mercury analyses. The study connects people to parks and provides baseline data for better understanding the spatial distribution of mercury contamination in national parks. Dragonfly larvae are useful because they build up higher levels of mercury than other types of water-dwelling insects, so they serve as an indicator species for changes in the environment.⁹

Department of Energy Lantern Live Mobile App for Disaster Affected Areas. The Department of Energy sponsors a free mobile app for Android devices that allows users in disaster-affected areas to report on the status of local gas stations, find fuel, and easily look up power outage maps from local utilities. The project is part of the White House Innovation for Disaster Response and Recovery Initiative.¹⁰

USAID Development Credit Authority Loan Data. In June 2012, the US Agency for International Development (USAID) launched a crowdsourcing initiative to pinpoint the location of USAID Development Credit Authority loan data and make the database publicly available as a case study. Prior to the project, the database could only be mapped at the national level even though it included additional geographic data. The goal was to add value to the data set by allowing users to map or query data at a more granular level. Visualizing where USAID enhances the capacity of the private sector can signal new areas for potential collaboration with host countries, researchers, development organizations, and the public.¹¹ The case study addressed some of the challenges and limitations the government faces in opening data for public use.

For these and other crowdsourcing activities, the federal government operates under certain laws, rules, and policies that differ in significant ways from those that apply to any other institution. Federal agencies must comply with constitutional principles, statutory obligations, regulatory processes, and administrative policies. These instruments, as well as agency operations and budgets, are shaped in part by political forces.¹² A given federal activity must at times conform to procedures and processes that were developed to address specific

⁹ National Parks Service, *Citizen Scientists Study Mercury in Dragonfly Larvae*, http://www.nature.nps.gov/air/studies/air_toxics/dragonfly/index.cfm.

¹⁰ Department of Energy, Office of Electricity Delivery and Energy Reliability, “Lantern Live” Mobile App Lights Way for Citizens Impacted by Disasters, <http://energy.gov/oe/articles/lantern-live-mobile-app-lights-way-citizens-impacted-disasters>.

¹¹ U.S. Agency for International Development, *Crowdsourcing to Geocode Development Credit Authority Data: A Case Study* (2012), <http://www.usaid.gov/sites/default/files/documents/2151/USAIDCrowdsourcingCaseStudy.pdf>.

¹² See, e.g., The White House, *The Open Government Partnership Second Open Government National Action Plan for the United States of America* (2013), http://www.whitehouse.gov/sites/default/files/docs/us_national_action_plan_6p.pdf (calling for expanded “use of crowdsourcing and citizen science programs to further engage the public in problem-solving.”).

problems that bear little direct relationship to the activity. Crowdsourcing—whether for good or otherwise—has not yet been the subject of much specific federal policy making.¹³

Many of those engaged in crowdsourcing at federal agencies—especially those engaged in scientific activities—may be insulated in their everyday activities from some of the mundane bureaucratic requirements found in laws like the Paperwork Reduction Act and the Privacy Act of 1974. For nearly all employees in federal agencies, the details of the Antideficiency Act are a mystery and are normally irrelevant to their work. The Information Quality Act has an unusual legislative history and lacks a clearly focused objective. Other laws and policies with potential relevance to crowdsourcing include the E-Government Act of 2002 and policies for the protection of human subjects (Common Rule).

When new federal activities like crowdsourcing meet rapidly changing technologies like mobile applications and web-based interactive collaboration tools, legal issues arise that may not be immediately recognized and may lack precedent, therefore requiring agency lawyers to scramble to keep up with developments. Legislation and administrative processes always trail technological developments. Early adopters of innovative endeavors in federal agencies may find legal and policy support unclear or entirely absent.

These factors may explain, in part, the perception among some in the federal crowdsourcing community that certain policies reflected in federal law are unfairly focused on them or that the rules were not intended to cover their activities. However, the laws that affect crowdsourcing also affect numerous other federal activities. Congress imposed the requirements for specific purposes and with broad application. While laws are not immutable, exceptions to existing laws are not easily or quickly obtained, even in the best of times. Like it or not, everyone at federal agencies must take the rules as they exist, at least in the short term.

This report focuses on explaining the laws applicable to crowdsourcing and on providing general guidance about how to comply with or else lawfully avoid application of those laws. Avoiding application of an administratively complex law is appropriate when done properly. For example, the Privacy Act of 1974 tells an agency what it must do if it collects personal information about those who volunteer to participate in a crowdsourcing activity. If the agency can structure the activity so that it collects no personal information, then the agency need not comply with the Privacy Act's procedures because the law does not apply. That is also a good result from a privacy perspective because not collecting personal information may be the best protection for the privacy of individuals.

While certain legal and administrative requirements applicable to crowdsourcing activities may be time consuming or cumbersome, none is an insurmountable barrier. When approached in good faith and with the proper spirit, any crowdsourcing proposal can comply with all applicable standards. Perhaps the most practical advice derived from discussions with government employees who have lived through compliance with various laws is “embrace the bureaucracy” or “embrace the process.”

¹³ In 2014, NASA adopted a policy directive on *Challenges, Prize Competitions and Crowdsourcing Activities*, NASA Policy Directive NPD 1090.1 (2014), <http://spaceref.com/news/viewsr.html?pid=45341>.

The thought behind those phrases is that legal obligations are unavoidable, so it is easier to comply with them gracefully than to complain and try to evade them. The obligations serve legitimate purposes determined through a standard governmental process. While the purposes may not always be immediately clear to those who encounter them for the first time, there may actually be a benefit to following the rules. Seeing the legal prerequisites to crowdsourcing from all perspectives so that requirements are understandable may be the greatest challenge that federal employees face in this area. This report thus seeks to contribute to a better understanding of relevant laws.

III. Other Relevant Reports

The Commons Lab of the Science and Technology Innovation Program at the Woodrow Wilson International Center for Scholars has been a leader in facilitating the effective and efficient adoption of crowdsourcing.¹⁴ The Lab commissioned and directed a series of reports that describe particular crowdsourcing activities and discuss the value and future of crowdsourcing.¹⁵ Many of these papers provided source material for this report. Other materials provided by the Commons Lab included interviews conducted by Lab staff with federal employees involved in crowdsourcing activities. The interviews provided important background material, identified key issues, and highlighted problems.

Two Commons Lab reports cover legal issues relevant here. One addresses federal liability from crowdsourced data.¹⁶ Another reviews liability issues for digital volunteers.¹⁷ This report does not review the issues examined by these two papers.

¹⁴ See <http://wilsoncommonslib.org/>.

¹⁵ See <http://www.wilsoncenter.org/publication-series/commons-lib>.

¹⁶ Bailey Smith, *Agency Liability Stemming from Citizen-Generated Data* (Commons Lab, Science and Technology Innovation Program, Woodrow Wilson International Center for Scholars, undated), <http://www.wilsoncenter.org/publication/agency-liability-stemming-citizen-generated-data>.

¹⁷ Edward S. Robson, *Responding to Liability: Evaluating and Reducing Tort Liability for Digital Volunteers* (Commons Lab, Science and Technology Innovation Program, Woodrow Wilson International Center for Scholars, 2012), <http://www.wilsoncenter.org/publication/responding-to-liability-evaluating-and-reducing-tort-liability-for-digital-volunteers>.

Paperwork Reduction Act

The Paperwork Reduction Act regulates federal agency activities that involve the collection of information from more than 10 persons. The goals of the law are to provide for better management of information resources, minimize burden on the public, avoid duplication, and assure the practical utility of collected information. When the law applies, a federal agency must develop a formal information collection request, publish its plans in the Federal Register, consider public comments, publish a second Federal Register notice, and ask the Office of Management and Budget for approval. The PRA applies to many crowdsourcing activities. Advice to “embrace the bureaucracy” is particularly relevant when navigating the PRA.

I. Introduction

The Paperwork Reduction Act (PRA) “is a statute that is often derided and rarely praised.”¹⁸ For many in the federal crowdsourcing world (as well as others involved in different agency endeavors), **the PRA appears to be a labyrinthine exercise in red tape and frustration.** While that is an understandable view, the PRA has a long history and a broader objective that are worth recounting in brief to facilitate understanding.

The origin of federal agency information collection limits is the Federal Reports Act of 1942, which gave the Bureau of the Budget (now OMB) authority to approve information collection requests.¹⁹ In 1977, the Commission on Federal Paperwork conducted a broad review of government programs and found, among many other conclusions, that the information collection clearance process was significantly flawed.²⁰ The Commission’s recommendations for change inspired the passage of the Paperwork Reduction Act of 1980.²¹ The political appeal of reducing paperwork is apparent, but the PRA had other purposes as well.

A broader goal of the 1980 PRA was to create a new government-wide organizational and policy framework to manage government information resources.²² At the heart of the PRA are principles of information resources management (IRM). Basic objectives of IRM are to give more attention to all stages of the information life cycle and to provide for better management of

¹⁸ Stuart Shapiro, *The Paperwork Reduction Act: Benefits, Costs and Directions for Reform*, 30 Government Information Quarterly 204 (2013), <http://www.sciencedirect.com/science/article/pii/S0740624X13000087>.

¹⁹ Pub. L. No. 77-831, 56 Stat. 1078 (1942).

²⁰ Commission on Federal Paperwork, *Final Summary Report* 50-51 (1977), <http://babel.hathitrust.org/cgi/pt?id=umn.31951d00818930g;view=1up;seq=3>.

²¹ Pub. L. No. 96-511, 94 Stat. 2812 (1980), 44 U.S.C. § 3501-3521, <http://www.law.cornell.edu/uscode/text/44/3501>. Congress enacted a major revision to the law in the Paperwork Reduction Act of 1995, Pub. L. No. 104-13, 109 Stat. 163 (1995). The discussion here reflects the current version of the law. Among other things, the 1995 changes established internal agency paperwork clearance requirements for agencies before submission of an information collection proposal for OMB review.

²² David Plocher, *The Paperwork Reduction Act of 1995: A Second Chance*, 13 Government Information Quarterly 35-36 (1996).

information resources.²³ This goal is achieved in part through a new framework that seeks greater coordination of a series of disparate laws addressing various aspects of information collection, processing, and management. The PRA also created the Office of Information and Regulatory Affairs at OMB.

Those who only encounter the PRA in connection with the OMB information collection clearance process may not see the bigger picture behind the law. The PRA is a principled law seeking to improve management and efficiency in the federal government. The PRA, together with ongoing developments in information technology, the growth of the Internet, and other factors, certainly contributed to greater awareness of the importance of managing information and information resources in the federal government. Further, it is difficult to question the PRA's narrower purpose of limiting information collection burdens that federal agencies impose on the American public by making sure that information collected provides "practical utility"²⁴ to the government. Information requests can be duplicative, overlapping, or not well designed enough to produce meaningful results worth the time spent on them. Restricting information collection was a clear purpose when Congress passed the PRA, and OMB can and does reject inadequate collection requests. There is, of course, still much to debate when it comes to the methods for accomplishing the purpose of the law.

II. Overview of Information Collection Requests

The PRA determines the process by which an agency obtains OMB approval for information collection,²⁵ and OMB issued a rule with additional details and specifications.²⁶ The clearance process has five basic steps:

1. An agency seeking to collect information from **10 or more individuals** develops the information collection request in accordance with the requirements of the rule (including a supporting statement that answers between 18 and 23 questions about the proposed collection) and obtains agency approval from the agency's CIO (or other designated agency official).
2. The agency publishes a notice in the Federal Register, giving the public 60 days to comment on the proposed information collection.
3. The agency evaluates the public comments.
4. The agency publishes in the Federal Register a second notice announcing the sending of the collection proposal to OMB for approval and inviting the public to submit comments to OMB within 30 days.

²³ *Id.* at 35, 41.

²⁴ 44 U.S.C. § 3502(11), <http://www.law.cornell.edu/uscode/text/44/3502>; 5 C.F.R. § 1320.3(l), <http://www.ecfr.gov/cgi-bin/text-idx?SID=414b0e7c3e569ef65dd7b7695cf621b1&node=pt5.3.1320>.

²⁵ 44 U.S.C. §§ 3506(c), 3507, & 3508, <http://www.law.cornell.edu/uscode/text/44/3506>, <http://www.law.cornell.edu/uscode/text/44/3507>, <http://www.law.cornell.edu/uscode/text/44/3508>.

²⁶ Office of Management and Budget, *Controlling Paperwork Burdens on the Public*, 5 C.F.R. Part 1320, <http://www.ecfr.gov/cgi-bin/text-idx?SID=414b0e7c3e569ef65dd7b7695cf621b1&node=pt5.3.1320>.

5. The agency submits its proposal for an information collection to OMB concurrent with the publication of the second Federal Register notice. OMB then has 30 additional days from the end of the comment period (or 60 days in total) to take action on the proposal.²⁷

These linear steps belie the complexity of the process. The OMB rule that describes the information collection clearance requirements has 18 sections and exceeds 11,000 words.²⁸ The law requires that each agency have an internal process for information clearance requests that is independent of program responsibilities. For a civil servant at a federal agency, obtaining clearance for an information collection request requires navigating the agency's internal bureaucracy through several different levels before an information request even reaches step two, the first Federal Register publication.

What follows here is a description of the PRA information collection process with a focus on how it affects crowdsourcing. As lengthy as this description is, it does not include those parts of the process that involve collections as part of rulemaking on the theory that crowdsourcing is not likely to be part of rulemaking.

When learning about the information collection process, it is important to keep in mind that, despite the length and complexity of the PRA, it is obviously possible for an information collection request to successfully navigate the process. For any well-considered crowdsourcing proposal, much of the effort required by the clearance process is the same as the effort needed to develop the proposal anyway. Important parts of the PRA clearance process happen within the agency that wants to undertake crowdsourcing, and the timing of those internal activities are wholly within the control of the agency.

III. What Is an Information Collection Request?

The notion of an information collection request is broader than the words imply. OMB wrote the rule expansively to cover activities that go beyond simple reporting to an agency.

The statutory definition of a *collection of information* is relatively simple. It means:

obtaining, causing to be obtained, soliciting, or requiring the disclosure to third parties or the public, of facts or opinions by or for an agency, regardless of form or format, calling for either:

²⁷ OMB published a useful primer on the information clearance process. Memorandum of April 7, 2010, on "Information Collection under the Paperwork Reduction Act,"

http://www.whitehouse.gov/sites/default/files/omb/assets/inforeg/PRAPrimer_04072010.pdf. A longer and perhaps more useful guide is a document never officially released by OMB as a final document. Office of Information and Regulatory Affairs, Office of Management and Budget, *The Paperwork Reduction Act of 1995: Implementing Guidance for OMB Review of Agency Information Collection* (Draft, August 16, 1999), <http://thecre.com/pdf/PRAguidenew.pdf>.

²⁸ Office of Management and Budget, *Controlling Paperwork Burdens on the Public*, 5 C.F.R. Part 1320, <http://www.ecfr.gov/cgi-bin/text-idx?SID=414b0e7c3e569ef65dd7b7695cf621b1&node=pt5.3.1320>.

- (1) answers to identical questions posed to, or identical reporting or recordkeeping requirements imposed on, 10 or more persons, other than agencies, instrumentalities, or employees of the United States; or
- (2) answers to questions posed to agencies, instrumentalities, or employees of the United States which are to be used for general statistical purposes.²⁹

The definition in the OMB Rule is more detailed. A collection of information occurs when an agency³⁰

- (1) obtains, solicits, or requires the disclosure to an agency by a third party or the public
- (2) information by means of identical questions posed to or identical reporting, recordkeeping, or disclosure requirements
- (3) from 10 or more persons
- (4) whether the collection is mandatory, voluntary, or required to obtain or retain a benefit.³¹

Asking the public to provide any information (whether on paper, through a website, or via a mobile app) can constitute an information collection. The decennial census is an obvious example of an information collection that falls under the PRA. Facts or opinions collected at public meetings or through a Federal Register publication are not information collections for PRA purposes. The rule includes some further glosses that help define the scope of an information collection.

Information: Information is any statement or estimate of fact or opinion. The definition excludes a change of address or a collection limited to basic identifying information.³² It includes a collection of information to monitor compliance with regulatory standards. Other exclusions include general solicitations of comments from the public through the Federal Register, at public meetings, through non-standardized follow-up questions designed to clarify responses to approved collections of information, and more.³³

²⁹ 44 U.S.C. § 3502(3)(A), <http://www.law.cornell.edu/uscode/text/44/3502>. Another part of the definition excludes federal civil and criminal actions, antitrust proceeding, and intelligence activities. See 44 U.S.C. § 3518(c), <http://www.law.cornell.edu/uscode/text/44/3518>.

³⁰ An agency is an executive department, military department, government corporation, government controlled corporation, or other establishment in the executive branch of the government, or any independent regulatory agency. 5 C.F.R. § 1320.3(a), <http://www.ecfr.gov/cgi-bin/text-idx?SID=414b0e7c3e569ef65dd7b7695cf621b1&node=pt5.3.1320>. The definition excludes some legislative branch agencies, the District of Columbia government, and government-owned contractor-operated facilities, including laboratories engaged in national defense research and production activities.

³¹ *Id.* at § 1320.3(c).

³² Identifying information about individuals is likely to be subject to the Privacy Act of 1974. 5 U.S.C. § 552a, <http://www.law.cornell.edu/uscode/text/5/552a>.

³³ 5 C.F.R. § 1320.3(h), <http://www.ecfr.gov/cgi-bin/text-idx?SID=414b0e7c3e569ef65dd7b7695cf621b1&node=pt5.3.1320>.

Form: The form of the collection is not relevant. The definition of a collection includes a laundry list of techniques and instruments,³⁴ and the intent to be as inclusive as possible is apparent. The rule references *technological collection techniques*, a phrase that covers an agency’s use of the Internet, text messages, Twitter, and any yet-to-be invented digital, wireless, or other collection method.

Obtain or Compile: An information collection does not only include information reported to an agency. If an agency requires a person to obtain or compile information in order to disclose the information to others or to the public through posting, notification, labeling, or other similar ways, the activity is still an information collection. Thus, requiring a manufacturer to provide consumers with a nutrition label for food qualifies as an information collection. The rule treats a voluntary collection the same as a mandatory collection.³⁵

Ten or More: For counting persons affected by an information request, all persons addressed by the request within any 12-month period count toward the total. If the person asked for information is expected to transmit the request to others, the others count as well.³⁶

Conduct or Sponsor: An information collection qualifies whether the agency collects the information itself or causes the collection through other methods. Thus, an agency “conducts or sponsors” a collection of information if the agency:

- causes another agency to collect the information;
- contracts or enters into a cooperative agreement with a person to collect the information; or
- requires one person to provide information to another person, or in similar ways causes another agency, contractor, partner in a cooperative agreement, or person to obtain, solicit, or require the disclosure to third parties or the public of information by or for an agency.³⁷

In other words, working with or through a third party that is not a federal agency may not avoid the PRA. OMB deliberately wrote the rule to limit the ability of an agency to avoid PRA requirements by tasking others to undertake an information collection.

³⁴ The list includes, “report forms; application forms; schedules; questionnaires; surveys; reporting or recordkeeping requirements; contracts; agreements; policy statements; plans; rules or regulations; planning requirements; circulars; directives; instructions; bulletins; requests for proposal or other procurement requirements; interview guides; oral communications; posting, notification, labeling, or similar disclosure requirements; telegraphic or telephonic requests; automated, electronic, mechanical, or other technological collection techniques; standard questionnaires used to monitor compliance with agency requirements; or any other techniques or technological methods used to monitor compliance with agency requirements. A ‘collection of information’ may implicitly or explicitly include related collection of information requirements.” *Id.* at § 1320.3(c)(1).

³⁵ *Id.* at § 1320.3(c)(2).

³⁶ A person does not count as one of the “10 or more” if the person is an employee of the respondent acting within the scope of employment; a contractor engaged by a respondent to comply with the collection of information; or a current employee of the federal government when acting within the scope of their employment. Other provisions not likely to matter in crowdsourcing activities: a) qualifying information collection activities contained in a rule of general applicability is deemed to involve 10 or more persons; and b) a collection addressed to all or most of an industry is presumed to involve 10 or more persons. *Id.* at § 1320.3(c)(4) & (i), (ii).

³⁷ *Id.* at § 1320.3(d).

Grantees: If a recipient of a federal grant undertakes a collection of information, the agency that made the grant conducted or sponsored the collection only if

- (1) the grant recipient conducted the collection at the specific request of the agency, or
- (2) if the grant's terms and conditions require that the agency specifically approve the collection or collection procedures.³⁸

In a 2010 memorandum on scientific research and the PRA, OMB clarified the law's application to federal grantees. A collection of information conducted through a federally-funded, investigator-initiated grant is generally not subject to OMB review under the PRA because the agency did not specifically request the grantee-conducted information collection and because the collection did not require the agency's specific approval.³⁹ **That suggests that some agencies may have the option to support (but not control or approve) some crowdsourcing activities without invoking the PRA. In this case, the "price" of avoiding the PRA is giving up control and approval over the activity.**

Extrapolating from the rules for grantees, the use of outside entities to sponsor information collection may be possible. However, if an agency uses an outside group in a manner that gives the agency too much control over the collection, then any collection request by the outside group remains subject to the information collection process. A partnership between the agency and another entity may not succeed in evading the PRA if the agency plays a significant role in designing the collection purpose or instrument.

In general, the rules governing the collection of information apply broadly to government collection activities, and the definitions in the rule are comprehensive. While there are some excluded activities, it is difficult to find "loopholes" that allow crowdsourced data collections to fall outside the PRA.

³⁸ *Id.* at § 1320.3(d)(1) & (2).

³⁹ Office of Management and Budget, Memorandum for the Heads of Executive Departments and Agencies, and Independent Regulatory Agencies, *Facilitating Scientific Research by Streamlining the Paperwork Reduction Act Process* 3 (2010) (M-11-07), <http://www.whitehouse.gov/sites/default/files/omb/memoranda/2011/m11-07.pdf>.

How is the PRA enforced?

Neither the PRA nor the OMB information clearance rule imposes any direct penalty if an agency fails to comply. There are two consequences if an agency seeks to collect information without proper clearance. First, OMB will not be happy, and as one agency states, OMB has ways of making an agency regret its behavior. Second, the PRA provides a person who fails to comply with an information request with a “complete defense” if an agency tries to sanction the person through any administrative or judicial proceeding for failure to comply with an information collection request that does not display a valid OMB control number or if the agency fails to inform the person that a valid control number is required.[†]

For a crowdsourced information collection where participation is voluntary, the inability to enforce compliance with an information request is not meaningful. However, an agency employee who fails to comply with the PRA and who thereby creates problems for the agency with OMB may be subject to internal discipline or other unwelcome consequences. OMB identifies agencies that violate the PRA in its annual Information Collection Budget, and violations can draw congressional notice.^{††}

[†] 44 U.S.C. § 3512.

^{††} The 2014 OMB report is at http://www.whitehouse.gov/sites/default/files/omb/inforeg/icb/icb_2014.pdf.

IV. General Requirements

A. Burden, Duplication, Utility

OMB’s rule states that OMB will not approve an information collection request unless an agency demonstrates that it has taken “every reasonable step” to ensure that the proposed collection

- (1) is the least burdensome necessary for the proper performance of the agency's functions to comply with legal requirements and achieve program objectives,
- (2) is not duplicative of information otherwise accessible to the agency, and
- (3) has practical utility.⁴⁰

An agency must also seek to minimize the cost to itself of collecting, processing, and using the information, but it may not do so by shifting disproportionate costs or burdens onto the public. As a practical matter, it is unclear what “every reasonable step” means. However, given OMB’s broad discretion in the clearance process, an agency must be aware of the need to satisfy the Office of Information and Regulatory Affairs (OIRA) desk officer who makes the decision.

⁴⁰ 5 C.F.R § 1320.5(d)(1), <http://www.ecfr.gov/cgi-bin/text-idx?SID=414b0e7c3e569ef65dd7b7695cf621b1&node=pt5.3.1320>.

B. Disfavored Practices

OMB disfavors some collection and reporting practices. OMB will **not** approve the practices listed here unless an agency demonstrates in its submission that the practice is necessary to satisfy statutory requirements or other substantial need. Specifically, OMB will not normally approve

- (1) requiring reporting more often than quarterly;
- (2) requiring a response to a collection of information in fewer than 30 days;
- (3) requiring submission of more than an original and two copies of any document;
- (4) requiring retention of records, other than health, medical, government contract, grant-in-aid, or tax records, for more than three years;
- (5) a statistical survey not designed to produce valid and reliable results generalizable to the universe of study;
- (6) requiring use of a statistical data classification not reviewed and approved by OMB;
- (7) including a pledge of confidentiality not supported by statutory or regulatory authority, not supported by disclosure and data security policies consistent with the pledge, or that unnecessarily impedes sharing of data with other agencies for compatible confidential use; or
- (8) requiring submission of proprietary, trade secret, or other confidential information unless the agency can demonstrate that it has procedures to protect the information's confidentiality.⁴¹

V. Clearing an Information Collection Request

No agency may conduct or sponsor a collection of information unless it complies with the required steps, obtains OMB approval, and receives a control number that it can display. As described above, there are five steps, each step with its own obligations.



The PRA requires each agency to establish a paperwork review process within the office of the CIO—one sufficiently independent of program responsibility to evaluate fairly whether a proposed collection of information meets the requirements.⁴² There is no direction about how an agency should develop proposed collections, and agency practices vary. As a practical matter,

⁴¹ *Id.* at § 1320.5(d)(2).

⁴² 44 U.S.C. § 3506(c), <http://www.law.cornell.edu/uscode/text/44/3506>; 5 C.F.R. § 1320.7, 1320.8, & 1320.9, <http://www.ecfr.gov/cgi-bin/text-idx?SID=414b0e7c3e569ef65dd7b7695cf621b1&node=pt5.3.1320>.

the initial and principal responsibility falls on the program office at the agency that wants to collect the information. The program office must make sure that the proposal addresses all the required elements, and the office must develop the documentation and justification for the information collection, which include responses to the questions in the OMB-required “supporting statement.” **The program office is much more likely to achieve its goal if it helps other agency components to carry out their responsibilities.** Satisfying OMB is the last step.

A Department of Health and Human Services website estimates that the full process of PRA submission and approval can take six to nine months.⁴³ However, the time for any given information clearance can vary tremendously. Of the five steps, the first is internal to the agency proposing the information clearance request. From conception to approval by the originating office, the agency CIO, legal staff, and other agency officials, the time required is unpredictable because it will differ from agency to agency and probably from proposal to proposal. A well-conceived and properly drafted clearance request that addresses all required elements might move through an agency quickly. A poorly conceived or incomplete proposal might bounce around an agency indefinitely.

The first Federal Register notice requires waiting at least 60 days after publication, in addition to the time needed for drafting and internally clearing the notice before publication. Public comments are the exception, with fewer than 10 percent of information clearance notices receiving any comment in response to the Federal Register notice.⁴⁴ An agency can also solicit comments through other means, and this need not take any additional time if it occurs during the 60-day period following publication. If an agency receives comments, the time it takes to evaluate them is within its control.

The next step is a second Federal Register notice and submission to OMB. The second Federal Register notice requires another 30 days’ wait for public comments, and submission to OMB can come at the same time as publication of the notice or earlier. The requirements for the submission are lengthy and specific. In many cases, the work required to complete the submission may be part of the original internal agency clearance process. If not, preparation of the submission will take additional time at this stage.

OMB then has 60 days to make a decision on the information collection request. If OMB fails to approve, disapprove, or ask for changes within the deadline, the submitting agency can immediately request an OMB control number, and OMB must grant the request. When a collection is up for renewal, OMB can grant month-to-month extensions while resolving issues. For new collections, agencies may be reluctant to demand a control number if OMB remains unhappy. OMB can meet the deadline by asking for a change or denying a request altogether.

In the end, it is difficult to offer any clear timeline for clearance of any given PRA information collection request. The steps in the process are clear, but the variable time for

⁴³ See Department of Health and Human Services, *Information Collection Request Time Line*, <http://www.hhs.gov/ocio/policy/collection/infocollectiontimeline.html>.

⁴⁴ Stuart Shapiro, *The Paperwork Reduction Act: Research on Current Practices and Recommendations for Reform*, Report to the Administrative Conference of the United States 15 (2012), <http://www.acus.gov/sites/default/files/documents/Revised-PRA-Report-2-9-12.pdf>.

several steps is largely within the control of the agency. The estimate of six to nine months overall may be a rough rule of thumb, but more time is a possibility. However, for the fast-track process (described below), clearance for a given request—once an agency obtains clearance of its initial generic information clearance request—can be given in only five days.

Finding Examples of Information Collection Requests

OMB maintains a searchable inventory of information clearance requests at <http://www.reginfo.gov/public/do/PRAMain>. Through this facility, anyone can find the supporting documentation for approved information clearance requests or for requests in process. Approved projects provide useful examples of how to fill out the necessary forms and how to explain how a project meets the standards of the PRA.

One example of an approved crowdsourcing project is the US Geological Survey's *iCoast—Did the Coast Change*,[†] which relies on volunteers to serve as the agency's "eyes on the coast" for documenting the nature, magnitude, and variability of coastal changes such as beach erosion, overwash deposition, island breaching, and destruction of infrastructure following hurricanes.

[†] Documents for this particular information collection request are at http://www.reginfo.gov/public/do/PRAViewDocument?ref_nbr=201401-1028-001, and the important Supporting Statement is at <http://www.reginfo.gov/public/do/DownloadDocument?documentID=491716&version=1>.

A. Step 1. Developing and Clearing an Information Collection Request Inside the Agency

1. Content

Prior to submitting an information collection request to OMB, an agency has to prepare and justify the information collection. In theory, this is the major substantive part of the clearance process. Obtaining OMB approval, the last step, is the major procedural part of the process. However, the robustness of the agency clearance process and the level of interest by an agency CIO may vary considerably. If an agency fails to do a good job justifying its clearance proposal on the front end, OMB may take a more active role in reviewing the proposal.

A proposal for an information collection must address these seven elements.

- (1) Need. Evaluate the need for the collection or, in the case of an existing collection, the continued need for the collection.
- (2) Description. Describe functionally the information to be collected.
- (3) Plan. Set out a plan for the collection of information.

- (4) Burden Estimate. Develop a specific, objectively supported estimate of burden, or for an existing collection, evaluate the burden imposed by the collection.
- (5) Reduce the Burden. Evaluate whether (and if so, to what extent) the burden on respondents can be reduced by use of automated, electronic, mechanical, or other technological collection techniques or other forms of information technology (e.g., permitting electronic submission of responses).
- (6) Pilot. Test the collection of information through a pilot program, if appropriate.
- (7) Use. Prepare a plan for the efficient and effective management and use of the information to be collected, including necessary resources.⁴⁵

With one exception, these requirements are unremarkable. Any well-thought-out activity should address the details and reasons for an information collection. The exception is the requirement to estimate the burden, a defined term in the rule.⁴⁶

The OMB rule defines *burden* as the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a federal agency, including

- (1) Reviewing instructions;
- (2) Developing, acquiring, installing, and utilizing technology and systems for the purpose of collecting, validating, and verifying information;
- (3) Developing, acquiring, installing, and utilizing technology and systems for the purpose of processing and maintaining information;
- (4) Developing, acquiring, installing, and utilizing technology and systems for the purpose of disclosing and providing information;
- (5) Adjusting the existing ways to comply with any previously applicable instructions and requirements;
- (6) Training personnel to be able to respond to a collection of information;
- (7) Searching data sources;
- (8) Completing and reviewing the collection of information; and
- (9) Transmitting or otherwise disclosing the information.⁴⁷

If applicable to a request, each of the nine elements in this broad and detailed definition of burden requires its own estimate. The program staff responsible for managing the information collection should develop the relevant numbers. Limited guidance is available from OMB.⁴⁸ An

⁴⁵ 5 C.F.R. § 1320.8(a), <http://www.ecfr.gov/cgi-bin/text-idx?SID=414b0e7c3e569ef65dd7b7695cf621b1&node=pt5.3.1320>.

⁴⁶ *Id.* at § 1320.3(b).

⁴⁷ *Id.* at § 1320.3(b)(1). Burden excludes activities that would happen in the normal course of activities or that state or local requirements impose otherwise. *Id.* at § 1320.3(b)(2) & (3). OMB's nine-part definition expands on the six-part definition in the Act. 44 U.S.C. § 3502(2), <http://www.law.cornell.edu/uscode/text/44/3502>.

⁴⁸ See Office of Management and Budget, Memorandum for the President's Management Council, *Guidance on Agency Survey and Statistical Information Collections* 11-12 (2006), http://www.whitehouse.gov/sites/default/files/omb/assets/omb/inforeg/pmc_survey_guidance_2006.pdf.

agency may first need to identify all the steps necessary to comply with the request and then estimate the time for each step to arrive at an estimate of total burden per respondent. The burden estimates require both hours and costs. For complex surveys of businesses, there may also be capital, operation, and maintenance costs associated with generating and maintaining the information. Costs can include developing, acquiring, installing, and utilizing technology to collect, validate, maintain, and report information as well as personnel training costs. Pilot tests (of fewer than 10 persons) may provide more accurate estimates.

For crowdsourcing activities, calculating burden may be simpler than for some other information collection activities. However, the voluntary nature of crowdsourcing does not exempt the agency from calculating the burden. The burden estimate should include a respondent's time as well as any innovative uses of technology (including, for example, downloading and installing cell phone apps). Later steps in the clearance process (public comments and OMB review) provide an opportunity to refine burden estimates.

2. Agency Process

The idea for an information collection and the development of the method for implementing the idea typically arise in an agency's program office. That is the first step in the process. The development of an actual proposal can take a long time. Given the multiple standards in the PRA process, it may be time well spent. Additional approval from that program office's management may be required, perhaps involving several layers of management. Each agency may have its own system for reviewing and controlling information clearance requests, with the possibility of more internal oversight at any point in the process.

Under the PRA and the OMB rule, formal responsibility for reviewing an information collection proposal to make sure it contains all necessary elements falls on the office of the CIO, often on the clearance officer in the CIO's office. The goal is to have someone independent of the originator of the collection proposal determine that the proposal meets all criteria and decide to forward the proposal to OMB for approval. Indeed, **only the CIO or the agency head can forward an information collection proposal to OMB.**⁴⁹

Although the CIO technically has responsibility for reviewing a proposed information collection request against the seven elements described above, in many agencies the program office must do the work and prepare the document that reflects the review. The CIO (or as is more likely in practice, the CIO's delegate) is more likely to review that effort. In the best-case scenario, the program office and the CIO will work together cooperatively to produce a document that satisfies all requirements.

The CIO must also be sure that an information request provides reasonable notice to potential respondents of six types of information:

- (1) The reasons for collecting the information;

⁴⁹ 5 C.F.R. § 1320.7(e), <http://www.ecfr.gov/cgi-bin/text-idx?SID=414b0e7c3e569ef65dd7b7695cf621b1&node=pt5.3.1320>.

- (2) The way the information furthers the proper performance of the functions of the agency;
- (3) An estimate, to the extent practicable, of the average burden of the collection;
- (4) Whether responses to the collection of information are voluntary, required to obtain or retain a benefit, or mandatory;
- (5) The nature and extent of confidentiality to be provided, if any; and
- (6) The fact that an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.⁵⁰

The PRA rule also requires that the agency provide the six notice elements in particular ways, depending on the nature of the collection instrument. For collections in writing, the six elements belong on the form or questionnaire or in the instructions or cover letter. For collections in electronic format, the six notice elements belong in the instructions, near the title, or on the first screen viewed by a respondent. For collections published in regulations or otherwise in the Federal Register, the six notice elements belong in the preamble to the rule, in the regulatory text, or in a separate notice announcing OMB approval of the collection. OMB may approve other notice methods.⁵¹

Showing that a proposed information collection meets these notice obligations is not expressly identified as an element of the required review. However, a program office seeking approval for an information collection should show how its proposal would satisfy notice obligations.

The CIO has other responsibilities under the PRA. The CIO must ensure that each information request is inventoried; has a valid OMB control number; and has an expiration date, if needed. The CIO must be sure that a request was properly reviewed by OMB. These general responsibilities are part of the oversight process for the PRA.

⁵⁰ *Id.* at § 1320.8(b)(3).

⁵¹ *Id.* at § 1320.8(c).

Information Collection Budget

Information collection requests must proceed through a complex process in order to receive formal approval from OMB. However, a program office proposing to collect information should be aware of the broader background. The CIO responsible for reviewing information collection requests must also prepare and submit to OMB “an annual comprehensive budget for all collections of information from the public to be conducted in the succeeding twelve months.”[†] OMB uses the annual information collection budget process for general oversight of agency implementation of PRA requirements. OMB developed the budget process as a way to oversee agency efforts to meet the law’s paperwork reduction requirements of a 10% reduction in FY 96 & 97, and a 5% reduction in FY 98-01.^{††}

What is noteworthy here from the perspective of the proponent of an information collection is that agency management or OMB may be looking at the agency’s overall burden of information collection requests. It is possible that administrative or political oversight may pressure an agency to reduce the overall paperwork burden it imposes on the public, and this pressure may (albeit rarely) affect the timing or approval of any given information collection request.

[†] 5 C.F.R. § 1320.17.

^{††} 44 U.S.C. § 3502(a).

B. Step 2. Public Notice and Comment – Round One

The second step in the clearance process is public notice and solicitation of comments. Public notice normally comes through Federal Register publication.⁵²

The procedures connected to the Federal Register publication and submission to OMB vary slightly depending on whether the information collection is part of a rulemaking⁵³ or is unconnected to a rulemaking. The differences are mostly technical, and the description here is for information collection unconnected to a rulemaking.

An agency seeking to collect information under the PRA must provide 60-day notice in the Federal Register and “otherwise consult”⁵⁴ with the public and other agencies. The agency must solicit comments about whether the information is necessary and will have practical utility; about

⁵² *Id.* at § 1320.8(d). The rule recognizes that there can be a public notice process that does not use the Federal Register. § 1320.8(d)(2). It is unclear when or how OMB would accept an alternate form of notice. An agency contemplating a different notice method would be well advised to check with OMB first.

⁵³ The PRA rule further distinguishes between a proposed new rulemaking and an existing rulemaking. Compare 5 C.F.R § 1320.11 (Clearance of collections of information in proposed rules) with 5 C.F.R § 1320.12 (Clearance of collections of information in current rules).

⁵⁴ Consultations other than through the Federal Register rarely happen. See Stuart Shapiro, *The Paperwork Reduction Act: Research on Current Practices and Recommendations for Reform*, Report to the Administrative Conference of the United States 15 (2012), <http://www.acus.gov/sites/default/files/documents/Revised-PRA-Report-2-9-12.pdf>.

the accuracy of the burden estimate; about the quality, utility, and clarity of the information; and about minimizing the burden on respondents, including through use of information technology.⁵⁵

C. Step 3. Evaluate Public Comments

An agency must evaluate any comments received in response to the Federal Register notice and adjust its proposal as appropriate.⁵⁶ Some agencies use this opportunity to further review the activity. The submission to OMB, the next step in the process, must include a summary of public comments.⁵⁷

D. Step 4. Public Notice and Comment – Round Two and Submission to OMB

The second Federal Register notice comes after the end of the first comment period and when or before an agency submits its information collection proposal to OMB. The second notice states that the agency seeks OMB approval for the collection. The notice must direct to the agency public requests for information, including a copy of the proposed collection and its supporting documentation. The notice must direct comments on the proposal to OMB, addressed to the Office of Information and Regulatory Affairs of OMB (*Attention: Desk Officer for [name of agency]*). The notice must allow 30 days for comment.⁵⁸

The required content of the second notice is:

- (1) a title for the collection of information;
- (2) a summary of the collection of information;
- (3) a brief description of the need for the information and proposed use of the information;
- (4) a description of the likely respondents, including the estimated number of likely respondents, and proposed frequency of response to the collection of information;
- (5) an estimate of the total annual reporting and record-keeping burden that will result from the collection of information;
- (6) notice that comments may be submitted to OMB; and
- (7) the time period within which the agency is requesting OMB to approve or disapprove the collection of information if the agency seeks OMB to conduct its review on an emergency basis.⁵⁹

An agency may submit to OMB a request for approval of an information collection proposal at the same time or after the second Federal Register notice. According to the published rule, the submission to OMB consists of seven items:

⁵⁵ 5 C.F.R. § 1320.8(d)(1), <http://www.ecfr.gov/cgi-bin/text-idx?SID=414b0e7c3e569ef65dd7b7695cf621b1&node=pt5.3.1320>.

⁵⁶ *Id.* at § 1320.5(a)(1)(ii).

⁵⁷ *Id.* at § 1320.5(a)(1)(iii)(F).

⁵⁸ *Id.* at § 1320.10(a).

⁵⁹ *Id.* at § 1320.5(a)(1)(iv).

- (1) a certification from the agency head or CIO (content of the certification set out below);
- (2) the proposed collection of information in accordance with the rule for an information collection under a proposed rule, a current rule, or not in a rule (as applicable);
- (3) an explanation for the agency's decision that it would not be appropriate for the proposed collection to display an expiration date;
- (4) an explanation for a decision to provide for any payment or gift to respondents, other than remuneration of contractors or grantees;
- (5) a statement about the use of automated, electronic, mechanical, or other technological collection techniques or other forms of information technology for information collection, and an explanation for the decision;
- (6) a citation to the first Federal Register notice, a summary of the public comments from that notice, and any actions taken by the agency in response to the comments; and
- (7) copies of pertinent statutory authority, regulations, and any related supporting materials requested by OMB.⁶⁰

The form used for submitting a request is OMB Form 83-I.⁶¹ The form includes 18 specific questions that the agency must answer, largely covering the subjects above (including burden estimates). Part B of the form requires additional information for collections of information employing statistical methods.

The first item in the submission to OMB is the required certification, which comes from the head of the agency, the CIO, or their designee. The certification must address 10 elements and must include a record supporting the certification.⁶² The proper official must certify that the proposed collection of information

- (1) is necessary for the proper performance of the functions of the agency, including that the information will have practical utility;
- (2) is not unnecessarily duplicative of information otherwise reasonably accessible to the agency;
- (3) reduces to the extent practicable and appropriate the burden on persons who shall provide information to or for the agency, including with respect to small entities, the use of such techniques as
 - (a) Establishing differing compliance or reporting requirements or timetables that take into account the resources available to those who are to respond;
 - (b) The clarification, consolidation, or simplification of compliance and reporting requirements; or

⁶⁰ *Id.* at § 1320.5(a)(1)(iii).

⁶¹ OMB Form 83-I, Paperwork Reduction Act Submission, <http://www.whitehouse.gov/sites/default/files/omb/inforeg/83i-fill.pdf>.

⁶² 5 C.F.R § 1320.9, <http://www.ecfr.gov/cgi-bin/text-idx?SID=414b0e7c3e569ef65dd7b7695cf621b1&node=pt5.3.1320>.

- (c) An exemption from coverage of the collection of information, or any part thereof;
- (4) is written using plain, coherent, and unambiguous terminology and is understandable to those who are to respond;
- (5) is to be implemented in ways consistent and compatible, to the maximum extent practicable, with the existing reporting and recordkeeping practices of respondents;
- (6) indicates for each recordkeeping requirement the length of time persons must maintain the records specified;
- (7) informs potential respondents of the estimated average burden, together with a request for comments on the accuracy of the estimate and for suggestions on reducing the burden;
- (8) has been developed by an office that has planned and allocated resources for the efficient and effective management and use of the information to be collected, including the processing of the information in a manner that will enhance the utility of the information for agencies and the public;
- (9) uses effective and efficient statistical survey methodology appropriate to the purpose for which the information is to be collected; and
- (10) to the maximum extent practicable, uses appropriate information technology to reduce burden and improve data quality, agency efficiency, and responsiveness to the public.⁶³

E. Step 5. OMB Review

The PRA⁶⁴ and the rule require that OMB act on a proposed collection of information within 60 days after receipt or publication of the second Federal Register notice (whichever is later). OMB can approve the collection, tell the agency to make a substantive or material change, or disapprove the collection. OMB must provide at least 30 days for public comment before making its decision (except for requests for emergency processing⁶⁵). If approved, OMB issues an OMB control number and, if appropriate, an expiration date. OMB approvals cannot last longer than three years.⁶⁶ If OMB fails to act in 60 days, an agency may request and OMB must assign without further delay a control number that may be valid for not more than one year.⁶⁷ Of course, OMB can always avoid this option by disapproving a request or asking for a change.

⁶³ *Id.* at § 1320.9.

⁶⁴ 44 U.S.C. § 3507(c), <http://www.law.cornell.edu/uscode/text/44/3507>.

⁶⁵ 5 C.F.R. § 1320.13, <http://www.ecfr.gov/cgi-bin/text-idx?SID=414b0e7c3e569ef65dd7b7695cf621b1&node=pt5.3.1320>.

⁶⁶ *Id.* at § 1320.10(b).

⁶⁷ *Id.* at § 1320.10(c).

VI. Other Features of the PRA Rules

A. Emergency Processing and Waiver

As permitted under the PRA,⁶⁸ the OMB rule has a procedure for emergency processing of information clearance requests. An agency head or CIO can request emergency processing. The request must include a written determination that the collection of information is needed faster than the rule's time limits allow and that the collection is essential to the mission of the agency. The written determination must also assert that the agency cannot comply with normal clearance procedures because 1) public harm is reasonably likely if normal procedures are followed; 2) of an unanticipated event; or 3) normal procedures are likely to prevent or disrupt collection or to cause a statutory or court ordered deadline to be missed. The first of the two Federal Register notices is still required unless waived. An OMB control number for emergency processing is only good for a maximum of 90 days.⁶⁹ Thus, unless the collection can be completed within those 90 days, use of the emergency processing procedure will not allow an agency to avoid the entire clearance process.

For some types of major disasters, even the emergency waiver in the PRA may be too time-consuming to use. However, OMB has the authority to waive any requirement of the clearance process to the extent permitted by law.⁷⁰ When the federal government mobilizes to respond to a major disaster, OMB's broad waiver authority may be more suited to authorize crowdsourcing for disaster response.

B. Independent Agency Override

Independent regulatory authorities (e.g., Securities and Exchange Commission, Federal Trade Commission) can override an OMB denial or request for change.⁷¹ The rule sets out the procedures, which include a majority vote by the members of the agency and an explanation to OMB. What may be most important here is that a regulatory agency must go through the clearance process and be denied by OMB before the agency can approve the collection over OMB's objection.

C. Delegation of Approval Authority

The PRA allows OMB to delegate its information clearance review authority for some or all of an agency's collections of information to an agency's CIO or agency head.⁷² The delegate must 1) be sufficiently independent of program responsibility to evaluate fairly whether proposed collections should be approved; 2) have sufficient resources to carry out the responsibility effectively; and 3) have established an agency review process that demonstrates the prompt, efficient, and effective performance of collection of information review responsibilities. OMB

⁶⁸ 44 U.S.C. § 3507(j), <http://www.law.cornell.edu/uscode/text/44/3507>.

⁶⁹ 5 C.F.R. § 1320.13, <http://www.ecfr.gov/cgi-bin/text-idx?SID=414b0e7c3e569ef65dd7b7695cf621b1&node=pt5.3.1320>.

⁷⁰ *Id.* at § 1320.18(d).

⁷¹ *Id.* at § 1320.15.

⁷² 44 U.S.C. § 3507(i), <http://www.law.cornell.edu/uscode/text/44/3507>.

can limit or rescind delegated authority and can review any individual collection as it chooses.⁷³ To date, OMB has delegated clearance authority only to the Federal Reserve and the managing director of the Federal Communications Commission.⁷⁴

VII. Other OMB PRA Guidance and Advice

From time to time, OMB publishes additional advice and new procedures for agencies to use in developing and clearing information collection requests. A summary of these documents follows. **While the new procedures may not have direct application to many crowdsourcing information collections, the willingness of OMB to find ways to adapt its procedures to new collection techniques or circumstances suggests that a well-founded request for a memo on approaches to clearing crowdsourced collections might receive a favorable reception.** It seems less likely that OMB would show enthusiasm for a broad crowdsourcing exemption from all, or even any, PRA information clearance requirements.

A. Social Media Guidance

In April 2010, OMB issued guidance on social media, web-based interactive technologies, and the PRA.⁷⁵ The memo took note of agency use of web-based technologies, such as blogs, wikis, and social networks, as a means of “publishing” solicitations for public comment and for conducting virtual public meetings. The memo explains that much of this activity falls outside the PRA process. Some general examples from the OMB memo follow, with the caveat that the memo reflects some additional distinctions and qualifications.

- **General solicitations.** Activities beyond the scope of the PRA include a general solicitation that poses a series of specific questions seeking public feedback, that is not a survey, or that calls for unstructured responses. However, surveys, including web polls and satisfaction surveys that pose identical specific questions (including through pop-up windows) are subject to PRA clearance.
- **Suggestions.** General requests for suggestions or feedback are not subject to the PRA, but requests for responses to a series of specific questions or a series of specific prompts that gather information (e.g., for purposes of aggregation or survey) about effectiveness of a program are subject to the PRA.
- **Mailing lists and user accounts.** Collecting names and addresses for a mailing list does not trigger the PRA, but asking for more than basic contact information (e.g., age, sex, race/ethnicity, employment, or citizenship status) would come under the PRA. The same distinction applies to creating user accounts. The PRA

⁷³ 5 C.F.R. § 1320.16, <http://www.ecfr.gov/cgi-bin/text-idx?SID=414b0e7c3e569ef65dd7b7695cf621b1&node=pt5.3.1320>.

⁷⁴ *Id.* at § 1320.16(d).

⁷⁵ Office of Management and Budget, Memorandum for the Heads of Executive Departments and Agencies, and Independent Regulatory Agencies, *Social Media, Web-Based Interactive Technologies, and the Paperwork Reduction Act* (2010), http://www.whitehouse.gov/sites/default/files/omb/assets/inforeg/SocialMediaGuidance_04072010.pdf.

does not apply to basic collections of contact information, but it does apply to collections of more detailed profiles.

- **Wikis.** Wikis generally do not trigger the PRA because they merely facilitate interactions between the agencies and the public. However, use of a wiki to collect information that an agency would otherwise gather by asking for responses to identical questions (e.g., posting a spreadsheet into which respondents are directed to enter compliance data) is subject to the PRA.
- **Contests and ideas.** The PRA does not cover essay or video contests that permit respondents to create their own submissions if the agency collects no additional information beyond what is necessary to contact the entrants. However, the PRA applies to a contest that asks for a mandatory series of structured responses or demographic information about the entrants. A generic clearance (see below) might be useful if an agency plans regular use of contests. An agency can ask for ideas for improving practices or for potential solutions to a scientific, technological, or other problem, or for innovations (e.g., video and software applications) that advance an agency's mission without triggering the PRA.

In September 2014, OMB issued additional guidance on web-based interactive technologies that expands upon the list of examples provided in the first social media guidance memo. The new guidance also clarifies when and how the PRA applies to use of technologies that help the public search for data and receive customized calculator outputs.⁷⁶ The memo explains that most web-based data search tools and calculators are not information collections that trigger the PRA. The PRA also generally does not apply to items collected to allow users to select or customize agency data on a website. For example, a Department of Energy website offers a "Find and Compare Cars" tool that lets users customize the presentation of fuel economy and fuel cost data. Because the agency does not collect any information about users other than what is necessary for customizing the data, the activity is not a collection subject to the PRA.

Nor does the PRA apply to items collected to allow users to obtain information from an agency formula or table, if the items collected are those necessary for the user to retrieve information and will not be used by the agency for other purposes, such as informing research and statistics or determining program funding. An example is a BMI (Body Mass Index) calculator offered by an agency for public use. Its use does not implicate the PRA.

An appendix to the September 2014 memo offers a table showing (1) exclusions to the definition of *information* under PRA regulations and (2) applications of the exclusions for social media and other web-based technologies. The content is not new, but it is usefully organized.⁷⁷

⁷⁶ Office of Management and Budget, Memorandum for the Heads of Executive Departments and Agencies, and Independent Regulatory Agencies, *Web-based Interactive Technologies: Data Search Tools, Calculators, and the Paperwork Reduction Act* (2014), <http://www.whitehouse.gov/sites/default/files/omb/inforeg/memos/2014/web-based-interactive-technologies-data-search-tools-calculators-paperwork-reduction-act.pdf>.

⁷⁷ Office of Management and Budget, "Exclusions to the Regulatory Definition of "Information" under Paperwork Reduction Act" (2014) (appendix to OMB Memorandum on *Web-based Interactive Technologies: Data Search Tools, Calculators, and the Paperwork Reduction Act*), <http://www.whitehouse.gov/sites/default/files/omb/inforeg/memos/2014/appendix-data-search-tools-calculators.pdf>.

Avoiding the PRA: The National Broadband Map

As the OMB guidance explains, not every type of data collection necessarily requires clearance under the Paperwork Reduction Act. In 2010, the Federal Communications Commission used a mobile application for crowdsourcing that collected information from millions of volunteers to build its National Broadband Map.[†] The mobile app collected limited information about data packets but no personal information that identified users. The PRA was not applied to the collection. No public document explains the rationale for the lack of application of the PRA, but the case suggests that there may be a *de minimus* (“too small to care about”) rule applicable in some cases. There is no guarantee that this suggestion is correct or that a *de minimus* rule would be available in other cases. Relevant here is an observation by one agency worker that evading the PRA can take just as long to accomplish as complying with the law, and it may not work.

[†] Zachary Bastian & Michael Byrne, *The National Broadband Map: A Case Study on Open Innovation for National Policy* (Woodrow Wilson Center, 2012), <http://www.wilsoncenter.org/event/the-national-broadband-map-case-study-open-innovation-for-national-policy>.

B. Generic Clearance and the Fast-Track Process

In May 2010, OMB clarified its longstanding policy for generic clearances of information collection requests for methodological testing, customer satisfaction surveys, focus groups, contests, and website satisfaction surveys.⁷⁸ A generic information clearance request seeks OMB approval of a plan for conducting more than one information collection using very similar methods when (1) the need for and the overall practical utility of the data collection can be evaluated in advance, as part of the review of the proposed plan, but (2) the agency cannot determine the details of the specific individual collections until later. Generic clearances cover information collections that are voluntary, low-burden, and uncontroversial.

The procedure for the generic clearance is the same as for a regular clearance, but there is a somewhat greater obligation to provide more information to the public and OMB about plans and goals because the generic clearance will not have the details that an ordinary clearance would have.

Once OMB approves a generic clearance, an agency submits a specific information collection (e.g., individual focus group scripts, test questions, surveys) to OMB for review, in accordance with the terms of the generic clearance. Commonly, OMB has 10 days to respond to an individual collection request submitted under a generic clearance. There is no requirement for Federal Register publication of an individual collection under a generic clearance. OMB may reject a proposed information collection that does not meet the terms of the generic clearance.

⁷⁸ Office of Management and Budget, Memorandum for the Heads of Executive Departments and Agencies, and Independent Regulatory Agencies, *Paperwork Reduction Act – Generic Clearances* (2010), http://www.whitehouse.gov/sites/default/files/omb/assets/inforeg/PRA_Gen_ICRs_5-28-2010.pdf.

In June 2011, OMB adopted a fast-track process to allow agencies to obtain timely feedback on service delivery.⁷⁹ A prerequisite for use of the fast-track process is approval of a generic clearance by an agency. Appropriate applications of the fast-track process include a focus group, one-time or panel discussion group, customer satisfaction survey, online survey, and test of a survey instrument. Information collections for research that do not directly benefit the agency's customer service delivery would not qualify for fast-track treatment, so the fast-track process may not lend itself to crowdsourcing applications.⁸⁰ OMB advises that an agency should generally not use the fast-track process for a survey that requires statistical rigor, that imposes significant burdens, that is controversial, or that an agency plans to publish. The fast-track procedure is the same as that used for individual clearance under the generic clearance process, with OMB objections coming within five days.⁸¹

To summarize, the generic clearance is for methodological testing, customer satisfaction surveys, focus groups, contests, and website satisfaction surveys that may be conducted repeatedly. Once the generic clearance is approved, the individual collections receive fast review. The fast-track process requires an initial generic clearance but then covers collections for research that do not benefit customer service delivery. Neither method is likely to apply to crowdsourcing. What is important is the willingness shown by OMB to adapt its strict rules to new developments and new needs.

C. Facilitating Scientific Research

In December 2010, OMB offered guidance on facilitating scientific research by streamlining the PRA information clearance process.⁸² The memo first explains how existing rules may apply and may not apply to some scientific endeavors. A second part explains PRA procedures, including generic clearances. Most relevant to crowdsourcing is OMB's willingness to consider scientific research under the generic clearance process. The third part of the memo emphasizes the value of early collaboration with OMB, including seeking guidance on survey and statistical information collections. OMB also suggests conducting overlapping review processes (e.g., institutional review board approval) concurrently with PRA clearance and minimizing duplication.

For scientific research that uses formal statistical and survey methodologies, Part B of Form OMB 83-I requires additional information. For these activities, OMB's Statistical and Science Policy Office has potentially useful expertise, and there is evidence that OMB's expertise

⁷⁹ Office of Management and Budget, Memorandum for the Heads of Executive Departments and Agencies, and Independent Regulatory Agencies, *New Fast-Track Process for Collecting Service Delivery Feedback Under the Paperwork Reduction Act* (2011), <http://www.whitehouse.gov/sites/default/files/omb/memoranda/2011/m11-26.pdf>.

⁸⁰ Office of Management and Budget, "FAQs for New Fast-Track Process for Collecting Service Delivery Feedback under the Paperwork Reduction Act" (2012) (appendix to OMB Memorandum on *New Fast-Track Process for Collecting Service Delivery Feedback Under the Paperwork Reduction Act*), <http://www.whitehouse.gov/sites/default/files/omb/assets/inforeg/pr-faqs.pdf>.

⁸¹ For more on the fast-track process, see Digitalgov.gov, <http://www.digitalgov.gov/resources/paperwork-reduction-act-fast-track-process/>.

⁸² Office of Management and Budget, Memorandum for the Heads of Executive Departments and Agencies, and Independent Regulatory Agencies, *Facilitating Scientific Research by Streamlining the Paperwork Reduction Act Process* 3 (2010) (M-11-07), <http://www.whitehouse.gov/sites/default/files/omb/memoranda/2011/m11-07.pdf>.

sometimes contributes to improvements in information collection design and methodology.⁸³ OMB published a lengthy memo offering guidance on information collections involving survey and statistical methodologies.⁸⁴ This guidance may help some crowdsourcing projects.

VIII. Strategies for Progress

A. Changing the Law; Changing the Rules

It is not inconceivable that the PRA law or rules could change to accommodate or exempt crowdsourcing in some major way. However, the prospects for significant change seem dim at present. Any loosening of paperwork reduction policies is likely to have little political appeal, regardless of the purpose. OMB has not shown much willingness over the years to change information clearance procedures in any major way.

A recent study of the PRA by the Administrative Conference of the United States (ACUS) resulted in a number of recommendations for change.⁸⁵ Most of the recommendations are for administrative changes and activities that would better achieve the goals of the PRA. ACUS addressed most of its recommendations to OMB, agency CIOs, the CIO Council, and to agencies. The recommendations seek generally to improve public engagement, use available resources to make the process easier, improve efficient use of resources, and emphasize the importance of information resources management. The only recommendation to Congress is to extend the approval period for some collections from three to five years. Adoption of any changes to improve the PRA process would benefit crowdsourcing along with other collection activities. It remains to be seen if the ACUS recommendations will produce significant change. The ACUS report is more than a year old, and formal evidence of change at OMB is not yet visible.

It is noteworthy that ACUS addressed only one recommendation to Congress. Congress has shown little interest in the ACUS recommendation or in otherwise amending the PRA. The PRA has not been amended substantively since the 1995 revision. However, separate laws pass from time to time exempting certain activities from the clearance process.⁸⁶

The occasional congressional enactment of specific PRA exemptions for certain activities suggests a possible approach for addressing PRA issues for crowdsourced collections. Several difficulties are apparent. First, a legislative proposal would require a clear and precise definition of crowdsourcing that would not be subject to abuse or misuse such that it would be seen as creating a loophole in the PRA. This is a challenge but should be possible to draft. Second, it is

⁸³ Stuart Shapiro, *The Paperwork Reduction Act: Benefits, Costs and Directions for Reform*, 30 Government Information Quarterly 207 (2013), <http://www.sciencedirect.com/science/article/pii/S0740624X13000087>.

⁸⁴ Office of Management and Budget, Memorandum for the Heads of Executive Departments and Agencies, and Independent Regulatory Agencies, *Guidance on Agency Survey and Statistical Information Collections* (2006), http://www.whitehouse.gov/sites/default/files/omb/assets/omb/inforeg/pmc_survey_guidance_2006.pdf.

⁸⁵ Administrative Conference of the United States, *Administrative Conference Recommendation 2012-4, Paperwork Reduction Act* (2012), <http://www.acus.gov/sites/default/files/documents/Final-Recommendation-2012-4-Paperwork-Reduction-Act.pdf>.

⁸⁶ See, e.g., Pub. L. No. 113-79, § 1601, 128 Stat. 649, 704 (relating to the Commodity Credit Corporation), <https://www.congress.gov/113/plaws/publ79/PLAW-113publ79.pdf>.

easier to exempt a specific program or activity from the PRA by legislation than to exempt a category of activities. **Even with a good definition, there may still be a need for a decision maker to distinguish PRA-covered activities from crowdsourcing-exempted activities on a case-by-case basis.** The most obvious decision maker is the office at OMB responsible for the PRA because there is no other existing office with responsibility outside of an agency seeking to use crowdsourcing. If so, an exemption for crowdsourcing would not avoid OMB entirely. Third, because there appears to be no existing law about crowdsourcing, a change affecting application of the PRA to crowdsourcing would have an uncertain route through Congress. Science committees might have more interest, but they may lack legislative jurisdiction over the PRA. If a change of some sort for crowdsourcing were seen as creating a “loophole” in the clearance process, that exemption might receive a chilly reception. A legislative proposal originating within an agency or elsewhere within the executive branch would need OMB approval, something that may not be easy to achieve. Still, a separate law providing a limited change in the application of the PRA to crowdsourcing is conceivable if pursued in the right way by the right congressional sponsor. Congress can usually find a way to do something that it wants to do, but crowdsourcing may need more development and recognition before Congress is willing to consider changes to the well-established PRA process.

ACUS based its recommendations on a report prepared for ACUS by Professor Stuart Shapiro from Rutgers University.⁸⁷ Professor Shapiro’s report contains a detailed review of the PRA law and process, with a focus on costs and benefits. In particular, the report offers a balanced view of the law, recognizing that the information clearance process provides benefits to balance its costs and consequences.

Shapiro addresses one issue that arises routinely in a crowdsourcing context, namely the application of the clearance process to voluntary activities. An exemption for voluntary collections is a popular suggestion for PRA reform.⁸⁸ However, Shapiro finds major differences of opinion on the idea.⁸⁹ Some argue that people tend to see a voluntary government request as mandatory. Some argue that the line between voluntary and mandatory is not always clear. Some observe that the government spends time and effort on voluntary collections and argue that the clearance process leads to better results and deters poorly framed requests. Collections using statistical methodologies may benefit the most from additional review.

It is telling that Shapiro does not recommend an exemption for voluntary collection, nor does ACUS. Instead, ACUS recommends that agencies use all available processes (e.g., generic clearances and fast-track procedures) for OMB review of voluntary collections.⁹⁰ If neither Professor Shapiro nor ACUS supports an exemption for voluntary collections, the argument is not likely to succeed elsewhere, notwithstanding any surface appeal. **In any event, a battle over a broad exemption for voluntary collection is a bigger battle than crowdsourcing advocates**

⁸⁷ Stuart Shapiro, *The Paperwork Reduction Act: Research on Current Practices and Recommendations for Reform*, Report to the Administrative Conference of the United States 15 (2012), <http://www.acus.gov/sites/default/files/documents/Revised-PRA-Report-2-9-12.pdf>.

⁸⁸ *Id.* at 29.

⁸⁹ *Id.* at 30.

⁹⁰ Administrative Conference of the United States, *Administrative Conference Recommendation 2012-4, Paperwork Reduction Act (2012) 5* (recommendation 2), <http://www.acus.gov/sites/default/files/documents/Final-Recommendation-2012-4-Paperwork-Reduction-Act.pdf>.

need to fight. Instead, crowdsourcing projects must accept the current rules as they are and learn to work with them.

B. Embrace the Bureaucracy

The PRA information clearance process is complex and can be lengthy. However, the process is not insurmountable or pointless. Further, there are existing methods like generic clearances that make things simpler and that all agencies should use when available. In other cases, the advice from more than one experienced navigator of OMB clearance boils down to this: “embrace the bureaucracy” or “embrace the process.” The advice comes in part from the recognition that the information clearance process is mostly unavoidable, so there is no point in seeking to evade or deny it. **Several people who contributed background information for this report suggested that attempts to evade the PRA process took just as long and were just as intense as going through the process.** Attempts at evasion may well fail or result in a violation of the PRA, with attendant difficulties when the violations come to light.

Those approaching the PRA, especially for the first time, should recognize that there is a legitimate substantive purpose to clearance. Those seeking information can benefit at times from other perspectives on their activities. For example, OMB may press an agency to ask more standard questions to make the data more useful both to the agency and to others. OMB may be able to provide statistical advice and assistance that will result in a better product. The first draft of every agency proposal will not necessarily represent the best or only way to accomplish the purpose or the best use of external resources (even volunteered resources). In at least some cases, either OMB or the public will offer helpful ideas. Another way to “embrace the bureaucracy” is to accept the PRA process and to try to use it to the agency’s advantage. The PRA process can help an agency to create better and more thoughtful models of crowdsourcing and to accomplish the agency mission in a better way.

More than one federal employee has observed that OMB faces the same resource and time limitations that agencies often face. Dedicated, hard-working OMB desk officers may not have the ability to devote sufficient attention to every task within their area of responsibility. It is useful for agency personnel to understand the limitations from the perspective of the OMB desk officer and look at clearance as a joint function that can be made easier and faster through joint efforts. As in many other routine endeavors, cooperation rather than confrontation can produce better results. **Reports of supportive OMB desk officers are *not* rare.**

C. Seek OMB Assistance

In recent years, OMB has demonstrated a willingness to develop new procedures under existing rules that make clearances easier to obtain. These include the generic and fast-track clearance procedures. In its memo on facilitating scientific research, OMB invites agencies to propose other types of collections that would benefit from generic clearances:

OMB continues to work with agencies to explore other types of collections that would benefit from the use of generic clearances, including in the domain of scientific research. Such clearances could be an appropriate tool for agencies that

engage in standardized but intermittent data collection triggered only under specified conditions that may occur in the future—for example, food poisoning epidemics, pandemics, hazardous waste accidents, or hurricanes, tropical storms, and floods. In these situations, the agency’s submission should include:

- its generalized plan for data collection in such situations;
- the goals of the collection;
- the key research questions that would need to be addressed;
- the protocols or standard operating procedures that would be used;
- sample instruments;
- a description of the target population subgroup (e.g., health care providers, critical infrastructure providers, educators); and
- the likely temporal and geographic scope of the project.⁹¹

Agencies that engage in crowdsourcing activities, even on an occasional basis, could benefit from collectively accepting the invitation to work with OMB. However, a close reading of the OMB interpretative and guidance memos on PRA shows that these memos generally do not provide exceptions to the rules but rather show agencies how to apply existing rules in particular situations in a focused and efficient way. In other words, expectations should be limited. OMB is not likely to exempt crowdsourcing broadly, and the PRA clearance process will not disappear from the agenda of federal agency crowdsourcers.

As a preliminary to approaching OMB, issues that crowdsourcing agencies might address include

- (1) **Making the case.** Approach OMB with evidence that crowdsourcing is a useful technique with broad application in different contexts. This should not be difficult, as OMB and the White House have already shown much interest in crowdsourcing in various contexts.⁹² A particular issue, albeit not the only one, is the need for both speed and flexibility in developing, testing, and implementing some crowdsourcing activities. Governmental processes are rarely compatible with the speed of Internet activities, where plans are made, changed, revised, redesigned, and carried out at breathtaking speed. OMB showed willingness to provide some flexibility for Internet activities when it approved a fast-track process for generic clearances of information

⁹¹ Office of Management and Budget, Memorandum for the Heads of Executive Departments and Agencies, and Independent Regulatory Agencies, *Facilitating Scientific Research by Streamlining the Paperwork Reduction Act Process* 3 (2010) (M-11-07), <http://www.whitehouse.gov/sites/default/files/omb/memoranda/2011/m11-07.pdf>.

⁹² See, e.g., Office of Management and Budget, Memorandum for the Heads of Executive Departments and Agencies, and Independent Regulatory Agencies, *Guidance on the Use of Challenges and Prizes to Promote Open Government* (M-10-11) (2010), http://www.whitehouse.gov/sites/default/files/omb/assets/memoranda_2010/m10-11.pdf. This document does not address crowdsourcing, but another webpage from DigitalGov does. See *Crowdsourcing with Challenge.gov*, <http://www.digitalgov.gov/services/challenge-gov/>. See also White House Blog, *Crowdsourcing Solutions to Prepare Our Communities* (2010), (August 5, 2013), <http://www.whitehouse.gov/blog/2013/08/05/crowdsourcing-disasters-and-social-engagement-multiplied>; White House Office of Science and Technology Policy, *Crowdsourcing Ideas to Accelerate Economic Growth and Prosperity through a Strategy for American Innovation*, White House Blog (July 28, 2014), <http://www.whitehouse.gov/blog/2014/07/28/crowdsourcing-ideas-accelerate-economic-growth-and-prosperity-through-strategy-ameri>.

collection requests for methodological testing, customer satisfaction surveys, focus groups, contests, and website satisfaction surveys. A similar accommodation specifically addressing the needs of crowdsourcing activities should be possible, but proposals should be restrained and expectations limited. It might be useful to ask OMB to provide guidance on estimating the burden hours for crowdsourcing because of the particular challenge that task presents.

- (2) **Categories of crowdsourcing.** OMB made its invitation for new procedures in the context of scientific research. Some types of crowdsourcing fit within that category, but not all types have a scientific objective. Some non-scientific activities may still engage in the “standardized but intermittent data collection” that OMB mentioned. Articulating these distinctions in clear terms will advance discussions with OMB and help to set the standards for a possible OMB crowdsourcing collection process. Distinctions might be usefully made between collections that provide general knowledge about phenomena (e.g., earthquakes) and collections that seek information for use in official agency proceedings (e.g., a preliminary to rulemaking or hearings). The former would likely be a better candidate for a shortened crowdsourcing clearance process than the latter. Another possible distinction is between collections that identify volunteers and those that collect no personal information.
- (3) **Standard collection plans and protocols.** Crowdsourcing agencies should work together to develop standardized collection plans and protocols for the different categories of crowdsourcing with the goal of having OMB approve their use either in general or in advance. This does not mean that one plan and one protocol will meet all needs, but not every crowdsourced information collection needs to be unique from an information clearance perspective. If each request for clearance does not seek to reinvent the wheel but rather uses familiar approaches, the process will be simpler for everyone.
- (4) **More flexibility.** Crowdsourcing projects may benefit if they have some flexibility to change the terms of collection, within some limits but without having to repeat the entire collection process. OMB already encourages the use of pilot testing, but crowdsourcers might seek looser rules that allow for some changes in an approved instrument to meet later identified needs and to learn from experience. A fast-track approval process for minor changes may be worth seeking.
- (5) **Statistical consulting with OMB.** Seeking simpler clearance for a crowdsourcing activity that raises statistical issues may be more challenging because OMB may be less inclined to agree. Crowdsourcing agencies should nevertheless discuss the idea with OMB’s Statistical and Science Policy Office to search for standard approaches that OMB might approve in advance or with minimal review. This could be an area where formal or informal guidance about crowdsourcing would be valuable to everyone.

D. More Cooperation Among Crowdsourcers

Agencies that engage in crowdsourcing can do more on their own to navigate the PRA clearance process. Some agencies already have internal organizations that focus on crowdsourcing.⁹³ Sharing documents and expertise should be major activities, both within agencies and across agencies. The suggestions here about cooperation are not entirely novel, and there is already much existing support, cooperation, and sharing among federal (and other) crowdsourcers.

These five steps in the process are most likely to benefit from inter-agency and intra-agency cooperation:

1. Developing a project and the accompanying information collection request within the agency. The first step is always developing the plan and justification for the crowdsourcing activity. The sharing of documents within an agency by those who have already cleared crowdsourcing projects would be valuable.⁹⁴ Agencies' processes and cultures often vary, but sharing documents with other agencies may also be valuable. Because the timing and requirements of this part of the process are wholly within the control of an agency—unlike other parts of the PRA clearance process that require actions by others—this may be a fruitful area for effective cooperation. Perhaps the part of the clearance process that can most benefit from the examples of other clearances is the estimate of burden. **Estimating a request's burden in hours and dollars may be the element most unfamiliar to would-be crowdsourcers.** Learning from others will make the task simpler. A community of practice or other type of formal or informal organization within an agency can help with development and internal clearance. Defining best practices within an agency or across agencies can also be a useful way to provide guidance.
2. Navigating the agency clearance process. While many of the clearance responsibilities fall on the agency's CIO, each agency may have its own variations. Sharing knowledge of the CIO process would be valuable to others in the same agency developing crowdsourcing projects, and cross-agency sharing will be useful in many cases as well. In particular, knowing what information and documents resulted in successfully obtaining agency approval will help others. Cultivating the CIO staff responsible for clearance in each agency so that crowdsourcing and its requirements are better understood may also be useful.
3. Federal Register notices. Federal Register notices are easy enough to find, but a central library of notices or links to notices may still have value. Descriptive

⁹³ See, e.g., Citizen Science Working Group, one of whose purposes is to “provide access to information and tools to support the proper, effective, and creative use of Citizen Science data in the USGS; and engage the public in USGS and partner science and improve scientific literacy.”

<https://my.usgs.gov/confluence/display/cdi/Citizen+Science+Working+Group>.

⁹⁴ OMB maintains resources on clearance requests and the OMB review process at <http://www.reginfo.gov/public/do/PRAMain>.

materials made available to the public but not published in the Federal Register are also candidates for sharing.

4. **Submission to OMB.** Sharing experiences and documents about how crowdsourcing projects obtained OMB approval has obvious value. For cleared projects, it might be useful to others if the sponsors of the project wrote and shared a description of issues and problems that OMB raised and how they were resolved. If sharing experiences about how to navigate OMB is too delicate to be done in writing, more informal methods (discussion groups, person-to-person meetings) might be useful.
5. **Establish a crowdsourcing support organization.** One way to expand collaboration across agencies is to have an external organization bring interested parties—including but not necessarily limited to federal employees—together to share information and provide a forum for discussion. One model comes from the American Society of Access Professionals (ASAP),⁹⁵ a not-for-profit organization that primarily serves those interested in the Freedom of Information Act and the Privacy Act of 1974. Many ASAP members are professional federal agency staff who work on these two laws. Others are members of the requester community, academics, attorneys, journalists, librarians, and government contractors. An important ASAP activity is providing training for FOIA and PRA professionals. A federally focused crowdsourcing organization could also attract those interested in crowdsourcing outside the federal government. A relatively recently formed organization with a broader scope than federal agencies is the Citizen Science Association (CSA), a still-developing non-profit group with an organizational home at the Schoodic Institute at Acadia National Park.⁹⁶ Federal agencies could work together under the auspices of an independent organization like CSA or could have their own organization.

In addition to the CSA, one candidate for hosting a crowdsourcing library or information center for agencies is the CIO Council. CIOs already have a role in approving and submitting paperwork clearance requests to OMB, and the Council has a document library and blog already in place that could be adapted for crowdsourcing purposes. A crowdsourcing information center would not only be useful to those who want to develop crowdsourcing projects, but it would also be helpful to CIO staff when clearing those projects to move through the clearance process. Some report that CIOs do not always show much interest in or enthusiasm for the clearance process or for crowdsourcing, so cultivating people in CIO offices may be useful in the long term.

The Office of Science and Technology Policy (OSTP) also plays a useful role today in organizing federal crowdsourcers and providing policy leadership. OSTP already actively promotes crowdsourcing generally and might provide more policy direction and serve more aggressively as a convener for federal agencies involved in crowdsourcing. OSTP support would be important if crowdsourcing agencies asked OMB to issue additional guidance on

⁹⁵ <http://accesspro.org/>.

⁹⁶ See <http://citizenscienceassociation.org/>.

crowdsourcing under the PRA. OSTP might take on the task of convening crowdsourcing enthusiasts in other agencies to make the case to OMB.

Information Quality Act

The Information Quality Act seeks to ensure and maximize the quality, objectivity, utility, and integrity of information that federal agencies disseminate to the public. Each agency has its own information quality guidelines. Because OMB guidance limits application of the IQA to the dissemination of information that has a clear and substantial impact on important public policies or important private sector decisions, the IQA's application to many crowdsourcing projects may be small.

I. Introduction

The purpose of the Information Quality Act (IQA)—also known as the Data Quality Act—is to ensure and maximize the quality, objectivity, utility, and integrity of information, including statistical information, disseminated to the public.

The IQA has an unusual pedigree for an information policy law. The IQA did not go through the traditional legislative process, with hearings, committee votes, and floor debates. Instead, the IQA was a rider on an appropriations law that received no legislative committee attention at all. It is, of course, still a law.

The IQA became law as section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001.⁹⁷ The details of the law are as follows:

(a) In General.—The Director of the Office of Management and Budget shall, by not later than September 30, 2001, and with public and Federal agency involvement, issue guidelines under sections 3504(d)(1) and 3516 of title 44, United States Code, that provide policy and procedural guidance to Federal agencies for ensuring and maximizing the quality, objectivity, utility, and integrity of information (including statistical information) disseminated by Federal agencies in fulfillment of the purposes and provisions of chapter 35 of title 44, United States Code, commonly referred to as the Paperwork Reduction Act.

(b) Content of Guidelines.—The guidelines under subsection (a) shall—

- (1) apply to the sharing by Federal agencies of, and access to, information disseminated by Federal agencies; and
- (2) require that each Federal agency to which the guidelines apply—
 - (A) issue guidelines ensuring and maximizing the quality, objectivity, utility, and integrity of information (including statistical information) disseminated by the agency, by not later

⁹⁷ Consolidated Appropriations – Fiscal Year 2001, Pub. L. No. 106-554, § 515, 114 Stat. 2763A153 to 2763A-154 (2000) (44 U.S.C. § 3516 note), http://www.law.cornell.edu/uscode/text/44/3516?qt-us_code_temp_noupdates=1#qt-us_code_temp_noupdates.

- than 1 year after the date of issuance of the guidelines under subsection (a);
- (B) establish administrative mechanisms allowing affected persons to seek and obtain correction of information maintained and disseminated by the agency that does not comply with the guidelines issued under subsection (a); and
- (C) report periodically to the Director—
- (i) the number and nature of complaints received by the agency regarding the accuracy of information disseminated by the agency; and
 - (ii) how such complaints were handled by the agency.

The law requires OMB to issue guidelines to agencies, and agencies in turn to issue guidelines that include an administrative mechanism allowing people to seek and obtain correction of information that does not meet the standards for quality.

The IQA was highly controversial at first, but this controversy faded in significance as time passed. Sponsors of the IQA promoted it as a “new set of tools to stop regulations before they even get started.”⁹⁸ An industry lawyer writing about the IQA in 2003 argued “that the guidelines are indeed the most significant conceptual advance in administrative law in the last three decades, but their likely impact has been vastly overstated by both sides of the debate.”⁹⁹ His first point remains debatable, but his assessment of impact seems correct.

In response to the IQA, OMB duly issued the required guidelines to agencies. The OMB designed the guidelines

- to apply to a wide variety of government information dissemination activities that may range in importance and scope;
- so that agencies will meet basic information quality standards; and
- so that agencies can apply them in a common-sense and workable manner.¹⁰⁰

II. Requirements

The OMB guidelines impose three general requirements on agencies. First, agencies must issue their own information quality guidelines ensuring and maximizing the quality, objectivity, utility, and integrity of information.¹⁰¹ Second, agencies must establish administrative mechanisms allowing affected persons to seek and obtain correction of information maintained and

⁹⁸ Chris Mooney, *Paralysis by Analysis: Jim Tozzi’s Regulation to End All Regulation*, Washington Monthly (May 2004), <http://www.washingtonmonthly.com/features/2004/0405.mooney.html>.

⁹⁹ James W. Conrad, Jr., *The Information Quality Act—Antiregulatory Costs of Mythic Proportions?* (2003), http://www.thecre.com/pdf/2003_conrad.pdf.

¹⁰⁰ Office of Management and Budget, *Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies*, 67 Federal Register 8452 (Feb. 22, 2002), <http://www.whitehouse.gov/sites/default/files/omb/assets/omb/fedreg/reproducible2.pdf>.

¹⁰¹ OMB maintains a link to all agency guidelines: http://www.whitehouse.gov/omb/inforeg_agency_info_quality_links/.

disseminated by the agency that does not comply with the OMB guidelines. Third, agencies must report annually to OMB on the number and nature of complaints received under the IQA and on the resolution of the complaints.¹⁰²

OMB also provides agencies with substantive guidelines for ensuring and maximizing the quality, objectivity, utility, and integrity of information disseminated by federal agencies. OMB instructed agencies to adopt a basic standard of quality (including objectivity, utility, and integrity) as a performance goal and to take appropriate steps to incorporate information quality criteria into agency information dissemination practices. Quality is to be ensured and established at levels appropriate to the nature and timeliness of the information to be disseminated. Each agency adopts specific standards of quality appropriate to the categories of information it disseminates.

As part of information resources management, OMB instructs agencies to develop a process for reviewing the quality (including the objectivity, utility, and integrity) of information before dissemination. OMB also tells agencies to treat information quality as integral to every step of an agency's development of information, including creation, collection, maintenance, and dissemination.

OMB also directs agencies to establish administrative mechanisms allowing affected persons to seek and obtain, where appropriate, timely correction of information maintained and disseminated by the agency that does not comply with OMB or agency guidelines. The procedures must include an administrative appeal for a requester who does not agree with the agency's disposition of the request.¹⁰³

As with any rule or guidance, the IQA guidelines include definitions and commentary that draw important boundaries around the requirements:

- **Dissemination.** The IQA applies to information that an agency disseminates. That means that the guidelines apply only to agency initiated or sponsored distribution of information to the public. The guidelines impose no new requirements on adjudicative proceedings. The definition excludes distributions limited to government employees or agency contractors or grantees; intra- or interagency use or sharing of government information; and responses to requests for agency records under the Freedom of Information Act and other open government laws. The definition also excludes press releases, public filings, and agency correspondence.¹⁰⁴

¹⁰² Office of Management and Budget, *Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies*, Part II (Agency Responsibilities), 67 Federal Register 8452 (Feb. 22, 2002), <http://www.whitehouse.gov/sites/default/files/omb/assets/omb/fedreg/reproducible2.pdf>.

¹⁰³ Office of Management and Budget, *Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies*, Part III (Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies), 67 Federal Register 8452 (Feb. 22, 2002), <http://www.whitehouse.gov/sites/default/files/omb/assets/omb/fedreg/reproducible2.pdf>.

¹⁰⁴ Office of Management and Budget, *Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies*, Part V (Definitions), 67 Federal Register 8452 (Feb. 22, 2002), <http://www.whitehouse.gov/sites/default/files/omb/assets/omb/fedreg/reproducible2.pdf>.

• **Sponsorship.** The IQA applies if an agency sponsors the dissemination. If a procurement contract or a grant provides for a person to conduct research, and then the agency directs the person to disseminate the results (or the agency reviews and approves the results before they may be disseminated), then the agency sponsors the dissemination and the IQA applies. A contract or grant document may require a reference to the agency’s IQA guidelines. **However, if an agency simply provides funding to support research, and the researcher (not the agency) decides whether to disseminate the results and the content, the agency is not a sponsor (despite the funding), and the IQA does not apply.**¹⁰⁵

• **Objectivity.** The requirement for objectivity has several elements. An agency should present information in an accurate, clear, complete, and unbiased manner. An agency should identify the sources of the disseminated information. An agency should provide, where appropriate, full, accurate, and transparent documentation and should identify error sources affecting data quality. In a scientific, financial, or statistical context, original and supporting data should be generated, and the analytic results developed using sound statistical and research methods. There is a rebuttable presumption that information subject to formal, independent, and external peer review meets objectivity standards.¹⁰⁶

• **Reproducibility.** If an agency is responsible for disseminating influential scientific, financial, or statistical information, the agency’s guidelines must include a high degree of transparency about data and methods to facilitate the reproducibility of the information by qualified third parties. In practice, ethical, feasibility, or confidentiality constraints may limit the ability of third parties to reproduce the agency’s methodology. Making both data and methods publicly available assists in determining whether analytic results are reproducible.¹⁰⁷

• **Influential.** When used in the phrase “influential scientific, financial, or statistical information,” *influential* means that the agency can reasonably determine that dissemination of the information will have or does have a clear and substantial impact on important public policies or important private sector decisions. Each agency can define *influential* as appropriate for the nature and multiplicity of its issues.

III. Discussion

The relevance of the IQA to crowdsourcing activities by federal agencies is uncertain. First, the public makes little use of the law. In a 2011 report to Congress on federal regulations, OMB summarized the number of IQA complaints received by agencies:¹⁰⁸

¹⁰⁵ Office of Management and Budget, *Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies, Public Comments and Agency Response*, 67 Federal Register 8452, 8454 (Feb. 22, 2002),

<http://www.whitehouse.gov/sites/default/files/omb/assets/omb/fedreg/reproducible2.pdf>.

¹⁰⁶ Office of Management and Budget, *Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies*, Part V (Definitions), 67 Federal Register 8452 (Feb. 22, 2002), <http://www.whitehouse.gov/sites/default/files/omb/assets/omb/fedreg/reproducible2.pdf>.

¹⁰⁷ *Id.*

¹⁰⁸ Office of Management and Budget, *2011 Report to Congress on the Benefits and Costs of Federal Regulations and Unfunded Mandates on State, Local, and Tribal Entities* 83 (2011), http://www.whitehouse.gov/sites/default/files/omb/inforeg/2011_cb/2011_cba_report.pdf.

FY 2003	48
FY 2004	37
FY 2005	24
FY 2006	22
FY 2007	21
FY 2008	14
FY 2009	17

The small and diminishing number of complaints suggests that the significance of the IQA may also be small and diminishing.

In addition, the courts have shown little interest in entertaining IQA complaints, and perhaps as a result, there has been remarkably little IQA litigation. In the few reported cases, the courts used different grounds to evade making substantive decisions in IQA litigation. In one case, a district court found that neither “the IQA nor the OMB Guidelines provide judicially manageable standards that would allow meaningful judicial review to determine whether an agency properly exercised its discretion in deciding a request to correct a prior communication.”¹⁰⁹ The appeals court upheld the lower court decision on the grounds that the IQA did not create “a legal right to access to information or to correctness.”¹¹⁰ In a third case, a district court held that all the guidelines require is “that the agency prepare some kind of ‘narrative’ that documents the strengths and weaknesses of the data upon which the document relies.” The court found no other “judicially manageable standards” in this guideline.¹¹¹

Whether for lack of standards or lack of jurisdiction, the courts have not provided aggrieved parties with IQA claims any hope of relief. That response from the courts may be the reason that the law did not fulfill the role that its drafters envisioned as a regulation “killer.” The rejection of IQA cases in the courts may have taken the sting out of the law and eased the burden on agencies to expend the extra effort that might be required if judicial review were available. That does not mean that agencies do not have to comply with the law, however.

Other factors may increase the consequences of the IQA for crowdsourcing at some agencies. First, the mere presence of the IQA may add fear, uncertainty, and discouragement to the process. The basic requirements of the IQA and agency rules provide only that there be a process for reviewing the quality of data before it is disseminated.. **Procedural fights (e.g., whether there should be peer review of data and whether the peer review was adequate) can be wearing.** Still, crowdsourcers should resist overreaction here.

Second, even if the IQA has limited relevance, some agency personnel may perceive it as another overarching barrier not easily overcome (even though this perception may not always match the reality).

¹⁰⁹ *Salt Inst. v. Thompson*, 345 F. Supp. 2d 589 (E.D. Va. 2004), *aff'd sub nom. on alternate grounds, Salt Inst. v. Leavitt*, 440 F.3d 156 (4th Cir. 2006).

¹¹⁰ *Salt Inst. v. Leavitt*, 440 F.3d 156 (4th Cir. 2006).

¹¹¹ *Delta Smelt Consol. Cases v. Salazar*, 760 F. Supp. 2d 855 (E.D. Cal 2010).

Third, not all of the fear may be misplaced. In long-running regulatory battles, science and scientific data may provide another front for those seeking to delay, change, or stop regulations. Where regulatory opponents have the resources, they may choose to fight regulatory battles at the earliest stages. An administrative fight over data quality may slow down the ability of an agency to proceed with a regulatory agenda that relies on that data. At the same time, many crowdsourcing data activities are unrelated or far removed from regulatory activities.

Fourth, some agencies and some agency activities draw considerable political interest, and OMB may pressure an agency in various ways (e.g., through additional informal reporting requirements or by asking to review agency decisions on IQA complaints). Whether it is fair to call political involvement a *distraction* is debatable, but additional attention, reporting, and meetings can delay substantive activities and discourage agencies. But again, many crowdsourcing projects are likely to be of little political interest.

In a crowdsourcing context, the IQA may sometimes create a barrier (whether real or perceived). But a collection or dissemination activity may be so distant from the regulatory process (or the agency may have no significant regulatory authority) that there may be few with an interest in challenging the activity. Further, the problem of data quality in crowdsourcing is already well known, and those who design and operate the activities seek ways of addressing quality issues as part of the program design.¹¹² The standards in the law may still apply, but those standards may be lower or no different than those otherwise applied by crowdsourcing sponsors to themselves.

Some general guidance from OMB also may be relevant and helpful to many crowdsourcing activities. In the final publication of the guidelines, OMB said an activity is *influential* only if “the agency can reasonably determine that dissemination of the information will have or does have a clear and substantial impact on important public policies or important private sector decisions.”¹¹³ Not all crowdsourcing activities will have a clear and substantial impact. OMB also recognized that “information quality comes at a cost.”¹¹⁴ **OMB directs agencies to weigh the costs (for example, including costs attributable to agency processing effort, respondent burden, maintenance of needed privacy, and assurances of suitable confidentiality) and the benefits of higher information quality in the development of information and the level of quality to which the information disseminated will be held. These considerations may limit the consequences of the IQA, even when it applies to crowdsourcing.**

¹¹² See, e.g., Anne Bowser & Lea Shanley, *New Visions in Citizen Science* 9 (Commons Lab, Science and Technology Innovation Program, Woodrow Wilson International Center for Scholars, 2013), www.wilsoncenter.org/sites/default/files/NewVisionsInCitizenScience.pdf. (“Data quality is an often-cited issue in citizen science, and data used for regulatory purposes must meet especially rigorous standards.”)

¹¹³ Office of Management and Budget, *Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies, Public Comments and Agency Response*, 67 Federal Register 8452, 8455 (Feb. 22, 2002), <http://www.whitehouse.gov/sites/default/files/omb/assets/omb/fedreg/reproducible2.pdf>.

¹¹⁴ Office of Management and Budget, *Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies*, Supplementary Information, 67 Federal Register 8452, 8453 (Feb. 22, 2002), <http://www.whitehouse.gov/sites/default/files/omb/assets/omb/fedreg/reproducible2.pdf>.

IV. Strategies for Progress

Whether anyone other than Congress could persuade OMB to change the IQA rules to address crowdsourcing issues is uncertain, but any change seems unlikely. Additional guidance from OMB might be a mild possibility if agencies could make a case that the IQA presents an unreasonable barrier to some activities and that guidance could establish useful distinctions consistent with IQA that would not create loopholes for agencies to exploit and proponents of the IQA to use as a basis for new litigation. Even that might be difficult to achieve if OMB does not think that the IQA presents any significant barriers to most agency actions. On the other hand, the IQA appears to have faded from the forefront of information policy and lost much of the force that its proponents wanted. Calling more attention to the IQA at this stage may not be helpful to those who see it as a potential barrier. Asking OMB to adjust the PRA process may be a higher priority for crowdsourcers than asking OMB to address the IQA.

In the end, it would be helpful if agency personnel involved with crowdsourcing had a better understanding of the specific requirements and limited application of the IQA. A clearer perception of the limits of this act would serve to diminish unreasonable fear and to support planning for meeting IQA obligations in an efficient way. Sharing experiences across agencies might help as well. Finally, **it would help if more people understood that the IQA is not likely to present a significant barrier to the many crowdsourcing activities that are unlikely to lead to controversial regulatory activities.**

The Antideficiency Act

The Antideficiency Act seeks to control federal spending by limiting the ability of agencies to create financial obligations in excess or in advance of appropriations. The Act restricts the ability of agencies to use volunteers, although some agencies have general authority to accept gifts of services. In other cases, agencies that follow proper procedures can use volunteers for crowdsourcing activities.

I. Introduction

Federal employees who engage in or who want to engage in crowdsourcing activities often cite the Antideficiency Act (the Act) as an impediment. The purpose of this section is to describe the Act, its purposes, and its application in a crowdsourcing context, as well as ways to avoid application of the Act and changes to law that might make crowdsourcing simpler.

II. Background

The Constitution places the power of the purse in Congress: "No Money shall be drawn from the Treasury, but in Consequence of Appropriations made by Law."¹¹⁵ Central to an understanding of the Antideficiency Act is the recognition that Congress enacted restrictions on expenditures to protect Congress's constitutional authority to control the public purse. According to one scholar,

If Congress permits the Executive access to the public fisc without effective appropriations control, then the Executive alone defines the scope and character of the public sphere, especially in areas that inherently require significant executive discretion.¹¹⁶

The Antideficiency Act seeks to keep executive spending within the boundaries that Congress established. The struggle over spending dates back at least to an 1820 law prohibiting expenditures in excess of appropriations.¹¹⁷ The Government Accountability Office in its "Red Book" on appropriations law states that

as late as the post-Civil War period it was not uncommon for agencies to incur obligations in excess, or in advance, of appropriations. Perhaps most egregious of all, some agencies would spend their entire appropriations during the first few months of the fiscal year, continue to incur obligations, and then return to Congress for appropriations to fund these "coercive deficiencies."¹¹⁸

¹¹⁵ U.S. Const. art. I, § 9, cl. 7.

¹¹⁶ Kate Stith, *Congress' Power of the Purse*, 97 Yale Law Journal 1343, 1345 (1988), http://digitalcommons.law.yale.edu/fss_papers/1267.

¹¹⁷ For a history of legislation leading to the Antideficiency Act, see, *id.* (providing a history of legislation leading to the Antideficiency Act).

¹¹⁸ Government Accountability Office, 2 *Principles of Federal Appropriations Law* 6-34 (2006) (GAO-06-382SP), <http://gao.gov/legal/redbook/redbook.html>.

The Act prevents federal officials (1) from making an expenditure in excess of existing funding and (2) from promising to pay in the future for goods or services in advance of an appropriation. Essentially, **Congress does not want an agency to present it with a moral obligation to pay for goods and services (e.g., services voluntarily provided) that the agency accepted.**

Another part of the Antideficiency Act addresses the acceptance of voluntary services. This part of the Act dates back to 1884.¹¹⁹ The evil that resulted in the statutory limit on voluntary services was a practice of asking some government employees to “volunteer” services for overtime work not authorized by law.¹²⁰ Another concern addressed by the provision is the acceptance of unauthorized services that were likely to afford a basis for a future claim for compensation from Congress.¹²¹

In addition, the acceptance of voluntary services also raises another appropriations limitation, namely the prohibition against augmentation of appropriated funds from sources other than congressional appropriations. GAO describes the purpose of the prohibition in these terms:

As a general proposition, an agency may not augment its appropriations from outside sources without specific statutory authority. When Congress makes an appropriation, it also is establishing an authorized program level. In other words, it is telling the agency that it cannot operate beyond the level that it can finance under its appropriation. To permit an agency to operate beyond this level with funds derived from some other source without specific congressional sanction would amount to a usurpation of the congressional prerogative.¹²²

No specific statute bans augmentation of appropriations, but GAO finds the concept has an “adequate statutory basis,”¹²³ the details of which are not of interest here.

Insofar as it is relevant to this discussion, the present codification of the Antideficiency Act prohibits a federal agency from the following:

- Making or authorizing an expenditure or obligation in excess of the amount available in an appropriation or fund unless authorized by law.¹²⁴
- Involving the government in any contract or other obligation for the payment of money for any purpose before an appropriation is made, unless authorized by law.¹²⁵

¹¹⁹ *Id.* at 6-94.

¹²⁰ *Id.* at 6-95.

¹²¹ See 30 Op. Att’y Gen. 51 (1913), cited in Government Accountability Office, *2 Principles of Federal Appropriations Law* 6-96 to 6-97 (2006) (GAO-06-382SP), <http://gao.gov/legal/redbook/redbook.html>.

¹²² Government Accountability Office, *2 Principles of Federal Appropriations Law* 6-162 (2006) (GAO-06-382SP), <http://gao.gov/legal/redbook/redbook.html>.

¹²³ *Id.* at 6-163.

¹²⁴ 31 U.S.C. § 1341(a)(1)(A), <http://www.law.cornell.edu/uscode/text/31/1341>.

¹²⁵ 31 U.S.C. § 1341(a)(1)(B), <http://www.law.cornell.edu/uscode/text/31/1341>.

- Accepting voluntary services for the United States, or employing personal services exceeding that authorized by law, except in cases of emergency involving the safety of human life or the protection of property.¹²⁶

Thus, the policies of the Antideficiency Act and principles of appropriations law establish that agencies must be beholden to Congress for funds, that agencies must live with the expenditure levels set by law, and that agencies may not accept funds or services from other sources. The Act applies to the acceptance of voluntary services from agency employees and from the general public. However, the Act itself recognizes that there may be exceptions (“unless authorized by law”), and interpretations of the law make distinctions that are not as rigid as the black letter principles suggest. **Agencies that respect congressional appropriation controls and meet procedural requirements can likely carry out most, if not all, crowdsourcing activities.**

III. Applying the Antideficiency Act

Major concerns about the Antideficiency Act in a crowdsourcing context derive first from the prohibition against acceptance of voluntary services, then from the prohibition against augmenting appropriations, and hardly at all from the prohibition against exceeding appropriations. Realizing that the goals of these prohibitions relate to protecting the appropriations process broadly and not specifically to banning voluntary services is helpful to an understanding of the law.

The restriction against acceptance of services is not quite as broad as it might appear on first reading. In 1920, the Comptroller of the Treasury wrote:

[The statute] was intended to guard against claims for compensation. A service offered clearly and distinctly as gratuitous with a proper record made of that fact does not violate this statute against acceptance of voluntary service. An appointment to serve without compensation which is accepted and properly recorded is not a violation of [31 U.S.C. § 1342], and is valid if otherwise lawful.¹²⁷

Two main principles emerge from the voluntary services restriction. First, when a law fixes compensation for a position, an appointee cannot agree to serve without compensation or to waive compensation. Second, if the level of compensation is discretionary or if the statute sets only a maximum and not a minimum salary, compensation can be zero, and an appointment without compensation is permissible.¹²⁸

The first principle is clear but not directly relevant to crowdsourcing, where typically there is neither a position nor fixed compensation. The second principle has somewhat more relevance to crowdsourcing, although crowdsourcing does not involve a statutory position. What the second

¹²⁶ 31 U.S.C. § 1342, <http://www.law.cornell.edu/uscode/text/31/1342>.

¹²⁷ 27 Comp. Dec. 131, 132–33 (1920), cited in Government Accountability Office, *2 Principles of Federal Appropriations Law* 6-97 (2006) (GAO-06-382SP), <http://gao.gov/legal/redbook/redbook.html>.

¹²⁸ Government Accountability Office, *2 Principles of Federal Appropriations Law* 6-97 (2006) (GAO-06-382SP), <http://gao.gov/legal/redbook/redbook.html>.

principle shows, however, is that acceptance of services without compensation is not impossible, but questions still remain about the limits.

In a 1947 decision, the Comptroller General found that it was lawful to employ experts and consultants without compensation under a general statute¹²⁹ that provides for the hiring of experts and consultants by agencies *as long as it is clearly understood and agreed that no compensation is expected*.¹³⁰ Other decisions by the Comptroller General and the Office of Legal Counsel at the Department of Justice make clear the need for a written record of an agreement from the individual volunteering services to serve without compensation.¹³¹ The written agreement provides a defense against a later demand by the individual for compensation for services rendered. The goal of the law is to prevent those possible demands from claiming a right to appropriated funds.

A 1982 decision by the Office of Legal Counsel (cited approvingly by GAO) states clearly that the objective of the Antideficiency Act's voluntary services prohibition was to avoid subsequent claims rather than to deprive the government of "gratuitous" services.

Although the interpretation of § [1342] has not been entirely consistent over the years, the weight of authority does support the view that the section was intended to eliminate subsequent claims against the United States for compensation of the 'volunteer,' rather than to deprive the government of the benefit of truly gratuitous services.¹³²

The decisions and principles summarized to this point revolve around appointment to an established civil service job or the hiring of experts or consultants. Crowdsourcing does not involve any established positions or contractual relationships between the service provider and the government. Questions still remain when a volunteer provides uncompensated services under other, less formal circumstances.

The acceptance of some gratuitous services by the federal government has been upheld in a series of cases. In one example, the American Association of Retired Persons (AARP) wanted to volunteer services to assist in crime prevention activities (distribute literature, give lectures, etc.) on Army installations. GAO found this to be acceptable under the Antideficiency Act if the services were agreed upon in advance and documented as gratuitous.¹³³ In general, GAO finds the government's interest under the Act protected with a written waiver of compensation.

However, this result contrasts (but does not conflict) with a decision about accepting uncompensated services of college interns. When an agency proposed to assign interns to

¹²⁹ 5 U.S.C. § 3109, <http://www.law.cornell.edu/uscode/text/5/3109>.

¹³⁰ 27 Comp. Gen. 194 (1947), <http://www.gao.gov/products/455487>. For additional authorities on this point, see Government Accountability Office, *2 Principles of Federal Appropriations Law* 6-99 (2006) (GAO-06-382SP), <http://gao.gov/legal/redbook/redbook.html>.

¹³¹ Government Accountability Office, *2 Principles of Federal Appropriations Law* 6-100 (2006) (collecting cases) (GAO-06-382SP), <http://gao.gov/legal/redbook/redbook.html>.

¹³² 6 Op. Off. Legal Counsel 160, 162 (1982), quoted in *id.* at 6-106 to 6-107.

¹³³ Comptroller General of the United States, *B-204326 (Acceptance of Voluntary Services)* (July 26, 1982), <http://www.gao.gov/products/119036>.

productive work in a position that would ordinarily fall in the competitive civil service, GAO rejected the proposal. Students could not volunteer for positions that would ordinarily be civil service positions where the compensation was fixed by law and could not be waived without legislative authority.¹³⁴

The student intern case raises several subtle substantive issues that are different from the procedural question of whether a volunteer signed an adequate waiver of compensation. These substantive issues are largely unexplored in relevant decisions from GAO. If a volunteer provides a function that would ordinarily be carried out by a government employee, we know from the student intern case that the Antideficiency Act applies, and the voluntary services cannot be accepted even with a waiver. In the AARP case, there was a high-level requirement for a crime prevention program, but no positions were associated with that function. AARP developed its own program, and the Army provided access to Army bases. GAO did not decide the case on the basis that the AARP was not filling a job that should have been filled by a government employee, but reading that basis for decision into the case seems plausible. In both the AARP and student intern cases, the volunteers signed waivers of compensation, so that is not a difference in the cases.

These cases dance around what constitutes a civil service function, something that varies from agency to agency and from program to program. In a case from 1959, GAO found a violation of the Antideficiency Act when volunteers at an Air Force facility provided office support (typing, filing, etc.) because the work of the volunteers would normally be undertaken by employees whose compensation was fixed by law and could not be reduced voluntarily without legal authorization.¹³⁵ Given the functions in that case, the conclusion was not hard to reach. However, the reality is that it may not always be clear whether a crowdsourcing volunteer fulfills a function that should be assigned to a civil servant.

The activities of crowdsourcing volunteers are likely to be narrowly focused on a specific type of data collection or analysis. A civil service position description probably would not be so specifically defined. For example, a federal agency function and a civil servant's job description may involve the protection of endangered species. However, neither the function nor job description is likely to include the detail of counting the number of birds on a beach, an activity that might be carried out through crowdsourcing. Similarly, the National Archives and Records Administration believes that their crowdsourcing activities "are not suitable for the duties of professional archivists; rather, this collaboration with the public allows NARA to conduct activities in support of its mission that would not otherwise be possible."¹³⁶ The contributions of volunteers would likely be seen as *input* to a federal employee who uses data from a variety of sources to carry out the function of protecting endangered species.

Another, subtly different, issue is whether a crowdsourcing volunteer provides a function that an agency should be undertaking so that the result is that the agency augments its appropriations by

¹³⁴ 26 Comp. Gen. 956 (1947), <http://www.gao.gov/products/472815>.

¹³⁵ Comptroller General of the United States, *B-139261* (June 26, 1959), <http://www.gao.gov/products/087248>.

¹³⁶ Anne Bowser & Lea A. Shanley, *New Visions in Citizen Science* (2013) (Commons Lab, Science and Technology Innovation Program, Woodrow Wilson International Center for Scholars), <http://www.wilsoncenter.org/publication/new-visions-citizen-science>, p.23.

accepting voluntary services for that function. It is possible that the agency is not performing the specific function because of higher priorities, lack of qualified personnel, or a shortage of funds. Some other GAO decisions hint at but do not clearly resolve the augmentation question.

In 1940, GAO decided whether the Census Bureau could accept gratuitous services from a group of social science associations in the preparation of official monographs analyzing census data. A signed agreement specified that there would be no cost to the government, and the government provided space and equipment. GAO noted that the agency did not have authority to accept services. The request said that the Census Bureau had authority and budget for analytic studies, but it did not have funds for the monographs in question. GAO approved the acceptance of services in this case.¹³⁷ GAO's short decision did not address augmentation of appropriations, although it appears that the agency simply ran out of funds and turned to volunteers to provide the desired monographs.

In 2010, GAO issued an audit report following an incident involving a contaminated drug (heparin).¹³⁸ Among many other findings, GAO found that the Food and Drug Administration (FDA) engaged external scientists to respond to the crisis. FDA hired two scientists by contract, and another was considered an FDA employee. Two other external scientists were volunteers. FDA engaged these and other external scientists because the agency lacked the necessary instrumentation and expertise. GAO objected that FDA's acceptance of voluntary services exposed the agency to the risk of claims for payment for the services provided because the volunteers did not sign a written agreement to waive compensation. That procedural objection covered familiar ground with respect to voluntary services. Perhaps because FDA admittedly lacked the expertise that the scientists provided, GAO did not address whether the volunteer scientists took on a responsibility that the agency should have undertaken using appropriated funds.¹³⁹

In a 2014 case involving the Treasury Department, GAO came a bit closer to addressing the substantive question of whether a volunteer can perform a particular function for an agency. The Treasury Department engaged four volunteers to carry out significant agency functions without asking them to sign a written waiver of compensation. GAO found that the Department violated the Antideficiency Act for lack of a proper waiver, and that ended the decision. However, GAO added a concluding cautionary observation:

We caution that compliance with the Antideficiency Act is but one of many relevant considerations when agencies accept gratuitous services. Agencies must ensure that all their activities are authorized and performed in accordance with applicable law, including personnel law, and that they avoid conflicts of interest, both institutional and individual, actual and perceived. Importantly, agencies may

¹³⁷ Comptroller General of the United States, *B-13378* (Nov. 20, 1940), <http://www.gao.gov/products/087771>.

¹³⁸ The audit raised other questions about agency procedures, conflicts of interest, the nature of an emergency for purposes of 31 U.S.C. § 1342, and FDA's authority to accept gifts. These other matters are not material here.

¹³⁹ Government Accountability Office, *Food and Drug Administration: Response to Heparin Contamination Helped Protect Public Health; Controls That Were Needed for Working With External Entities Were Recently Added* (2010), (GAO-11-95), <http://www.gao.gov/products/GAO-11-95>.

also need to consider whether a function is inherently governmental and, therefore, must be performed by a federal employee.¹⁴⁰

None of these GAO cases offers guidance about when or whether the use of a volunteer to carry out a function augments an appropriation. One might have expected to see the issue raised in the Census case, where volunteers appeared to be preparing monographs similar to those that the agency itself provided. In the Treasury case, GAO raised a somewhat related question of whether a function is inherently governmental and must be performed by a federal employee. The *inherently governmental* issue is much less likely to arise in a crowdsourcing context, but the broader question of whether acceptance of volunteered services could be an illegal augmentation remains.¹⁴¹

It may be understandable that GAO decisions do not reach the subtler, substantive questions about replacing a government employee or using a volunteer to augment an appropriation. These questions presented to GAO did not squarely raise those issues, and GAO reached conclusions on narrower, procedural grounds (e.g., lack of a written waiver). The Census case may be the most difficult one to explain. One may speculate that GAO ignored the augmentation issue there because the monographs benefited the volunteers as much as the agency, or perhaps GAO did not perceive that the Census Bureau undertook any fiscally evasive activity or undermined federal civil service protections or rules. It is also possible that the case was wrongly decided.

GAO has not been asked for an appropriations ruling with respect to crowdsourcing, and that makes it difficult to offer a definitive answer here. Nevertheless, the two issues of civil service functions and augmentation of appropriations via crowdsourcing appear to turn in large part on related definitional issues about the functions of an agency and the duties of a civil servant. How an agency sees its own functions and the role of its employees is likely to carry significant weight if the issues ever arise in an Antideficiency Act context. **By carefully defining those roles and by assigning narrow tasks to volunteers, an agency should be able to control the terms of the Antideficiency Act discussion.** To the extent that crowdsourcing focuses narrowly on activities that provide information or services that support (and do not replace) an agency mission or function, it seems much less likely that GAO would see the activities as raising Antideficiency Act problems provided that an agency satisfied the clearer procedural (waiver of compensation) requirement.

In other words, a well-planned, narrowly-defined crowdsourcing activity that includes a written waiver of compensation signed by the volunteers seems unlikely to violate the Antideficiency Act. Given the silence of GAO on crowdsourcing, that conclusion is not entirely free from doubt. The next section suggests ways to avoid the Antideficiency Act with more confidence.

¹⁴⁰ Government Accountability Office, *B-324214 (Matter of: Department of the Treasury—Acceptance of Voluntary Services)* (Jan. 27, 2014), <http://www.gao.gov/products/D06652>.

¹⁴¹ An example of an inherently governmental function that must be performed by federal employees is the preparation of a strategic plan for an agency. 5 U.S.C. § 306(e), <http://www.law.cornell.edu/uscode/text/5/306>.

IV. Escaping from the Antideficiency Act

The Antideficiency Act and its interpretations create what might be called *safe harbors*, or activities that clearly do not violate the Act.

The first is when the government and the volunteer have a written agreement that the services are to be rendered gratuitously with no expectation of future payment. As discussed just above, there can be some uncertainty about whether the function of the volunteer involves a function that should be performed by a civil servant or if the activity augments an agency's appropriation. However, authoritative interpretations by GAO and others make it clear that under many circumstances, a volunteer who signs a written waiver of compensation can provide gratuitous services to an agency without placing the agency in jeopardy of an Antideficiency Act violation.

A second escape from the Act is explicit in the text of the Act: The Antideficiency Act allows an agency to accept volunteer services in cases of emergencies involving the safety of human life or the protection of property. Because crowdsourcing activities are unlikely to fall under this exception, the interpretative details of the text of the law are not included here. GAO's Red Book provides more specifics.¹⁴²

A third escape from the Act also comes from the text of the Act, which gives an *authorized by law* exception. Following the decision that banned agencies from hiring unpaid student interns to perform substantive activities, Congress passed a law allowing agencies to accept voluntary services from students as long as the students do not displace any employee.¹⁴³ That law met the *authorized by law* requirement of the Antideficiency Act. The student intern law is not unique in authorizing agencies to accept volunteers.¹⁴⁴

Another variant of the *authorized by law* exception comes from statutes allowing agencies to accept gifts. For example, this law gives NASA expansive authority to accept gifts:

In the performance of its functions, the Administration [of NASA] is authorized to accept unconditional gifts or donations of services, money, or property, real, personal, or mixed, tangible or intangible.¹⁴⁵

A statute may allow an agency to accept gifts of various types, including gifts of services. In GAO's audit of FDA's heparin activities, GAO's report noted that the FDA's statutory authority to accept gifts did not specifically mention gifts of services.¹⁴⁶ GAO did not rule on the actual scope of FDA's authority in its audit report. The report suggests that there may be some question about an agency's ability to accept gifts of services if its statutory authority to accept gifts does

¹⁴² Government Accountability Office, *2 Principles of Federal Appropriations Law* 6-111 to 6-116 (2006) (GAO-06-382SP), <http://gao.gov/legal/redbook/redbook.html>.

¹⁴³ 5 U.S.C. § 3111(b), <http://www.law.cornell.edu/uscode/text/5/3111>.

¹⁴⁴ See, e.g., the Information Technology Exchange Program, 5 U.S.C. chapter 37, <http://www.law.cornell.edu/uscode/text/5/part-III/subpart-B/chapter-37>.

¹⁴⁵ 51 U.S.C. § 20113(d), <http://www.law.cornell.edu/uscode/text/51/20113>.

¹⁴⁶ Government Accountability Office, *Food and Drug Administration: Response to Heparin Contamination Helped Protect Public Health; Controls That Were Needed for Working With External Entities Were Recently Added* 31-32 (2010) (GAO-11-95), <http://www.gao.gov/products/GAO-11-95>.

not expressly mention gifts of services. Further, there can be issues about the scope of an agency's authority to accept gifts of services—particularly for an individual who serves as a government employee without compensation—depending on the exact wording of the agency's statute.¹⁴⁷ This last issue may have no importance in a crowdsourcing context since the volunteers typically do not serve as government employees.

Finally, the Antideficiency Act prohibits the acceptance of both voluntary services and personal services.¹⁴⁸ These are two different types of services, and the same rules apply to both categories. Many of the GAO cases and much of the above discussion considers personal services, but some cases address other types of services as well.¹⁴⁹ In the Census Bureau case discussed above, the services provided were monographs. In a crowdsourcing context, a volunteer could donate computer services, and an agency could accept the donation under the same conditions that apply to the acceptance of personal services.

V. Strategies for Progress

Many agencies already have authority to accept gifts, including gifts of services. Anyone in an agency considering a crowdsourcing activity should be able to obtain a definitive answer about the agency's existing authority from the agency's general counsel.

Some of the uncertainties about the application of the Antideficiency Act might disappear if an agency formally asked GAO specific questions about a planned crowdsourcing project. An agency that did not have the authority to accept gifts would have to make the request. Another way to approach GAO is through a congressional committee that could pose a series of real or hypothetical questions about the boundaries of the law or ask for a clarification of the application of the Act in a crowdsourcing context.

It seems unlikely that Congress would amend the Antideficiency Act directly on behalf of crowdsourcing. However, from time to time over the years, Congress has passed legislation relaxing some of the standards in the Act for particular agencies or activities. It is conceivable that Congress might allow all or some agencies to accept gifts of services for crowdsourcing activities. A statute for that purpose would require a carefully written definition of *crowdsourcing* that ideally would anticipate future developments. An alternative approach is for those agencies that want to engage in crowdsourcing and that do not have gift authority to seek changes in their basic statutes. Granting agencies broad authority to accept gifts of services has not proved controversial in the past.

¹⁴⁷ See Government Accountability Office, *B-190466*, 57 Comp. Gen. 423 (April 19, 1978), <http://www.gao.gov/products/482392>.

¹⁴⁸ 31 U.S.C. § 1342, <http://www.law.cornell.edu/uscode/text/31/1342>.

¹⁴⁹ Comptroller General of the United States, *B-13378* (November 20, 1940), <http://www.gao.gov/products/087771>.

Privacy and Information Policy

Federal information management laws affect crowdsourcing activities in much the same way that they affect other federal agency operations. The E-Government Act of 2002 requires agencies to conduct privacy impact assessments before creating new privacy risks. The Privacy Act of 1974 establishes rules for agencies collecting personal information. Other federal and even international privacy laws may be relevant in some cases as well. The Freedom of Information Act and Federal Records Act affect public disclosure and archiving of crowdsourcing records.

I. Introduction

Not all crowdsourcing activities collect personal information or raise privacy issues, but privacy presents challenges in some cases, perhaps in unexpected ways. Even collecting minimal information about volunteers participating in crowdsourcing may create privacy obligations for federal agencies under various statutes. Many agencies have privacy offices, privacy officers, or other privacy resources that may be available to help identify legal obligations, carry out privacy requirements, and generally do the right thing about protecting the privacy of personal information. Each agency also has a Senior Agency Official for Privacy.¹⁵⁰

Privacy obligations for federal agencies are likely to present few substantive limitations in a crowdsourcing context, but there are several relevant laws and different publication and evaluation requirements to meet. Complying with privacy law generally means satisfying largely procedural requirements that are mostly within the control of the agency. OMB plays a role both in privacy requirements and the Paperwork Reduction Act requirements, and an agency undertaking crowdsourcing is likely to need OMB approval one way or the other. The E-Government Act of 2002 defines some additional agency obligations relating to privacy.

II. E-Government Act of 2002

The E-Government Act of 2002 requires agencies to conduct privacy impact assessments (PIAs) before creating new privacy risks. Specifically, the requirement attaches when an agency

- develops or procures information technology systems or projects that collect, maintain, or disseminate information in identifiable form from or about members of the public, or

¹⁵⁰ See Office of Management and Budget, Memorandum for Heads of Executive Departments and Agencies, *Designation of Senior Agency Officials for Privacy* (2005) (M-05-08), <http://www.whitehouse.gov/sites/default/files/omb/assets/omb/memoranda/fy2005/m05-08.pdf>. The CIO, who has other functions under the PRA and E-Government Act of 2002, may well be the agency's Senior Official for Privacy, but some agencies have assigned privacy responsibility elsewhere.

- initiates, consistent with the Paperwork Reduction Act, a new electronic collection of information in identifiable form for 10 or more persons.¹⁵¹

OMB defines a PIA as

an analysis of how information is handled: (i) to ensure handling conforms to applicable legal, regulatory, and policy requirements regarding privacy, (ii) to determine the risks and effects of collecting, maintaining, and disseminating information in identifiable form in an electronic information system, and (iii) to examine and evaluate protections and alternative processes for handling information to mitigate potential privacy risks.¹⁵²

The requirement for a PIA is likely to apply to any crowdsourcing activity that requires an information clearance request under the PRA *and* that collects any personally identifiable information.¹⁵³ Each agency conducts its own PIAs, and they are not submitted to or approved by OMB.

If, as seems likely with crowdsourcing, information collection does not create a “major” information system,¹⁵⁴ an extensive PIA is not required. An agency can carry out much of the work related to a PIA at the same time as it complies with the Privacy Act of 1974.¹⁵⁵ To put it another way, meeting the requirements of the Privacy Act of 1974 will go a long way toward satisfying the PIA requirements of the E-Government Act of 2002.¹⁵⁶ Indeed, an agency

¹⁵¹ Public Law No. 107-347, 116 Stat. 2910 (2002), 44 U.S.C. § 3501 note, <http://www.law.cornell.edu/uscode/text/44/3501>.

¹⁵² Office of Management and Budget, Memorandum for Heads of Executive Departments and Agencies, *OMB Guidance for Implementing the Privacy Provisions of the E-Government Act of 2002* at Attachment A, II-A-f (2003) (OMB-M-03-22), http://www.whitehouse.gov/omb/memoranda_m03-22/.

¹⁵³ In its E-Government guidance, OMB uses the term *information in identifiable form*, which is a different term than *record* used in the Privacy Act of 1974. Information in identifiable form is “information in an IT system or online collection: (i) that directly identifies an individual (e.g., name, address, social security number or other identifying number or code, telephone number, email address, etc.) or (ii) by which an agency intends to identify specific individuals in conjunction with other data elements, i.e., indirect identification. (These data elements may include a combination of gender, race, birth date, geographic indicator, and other descriptors).” Office of Management and Budget, Memorandum for Heads of Executive Departments and Agencies, *OMB Guidance for Implementing the Privacy Provisions of the E-Government Act of 2002* at Attachment A, II-A-b (2003) (OMB-M-03-22), http://www.whitehouse.gov/omb/memoranda_m03-22/. As a practical matter, the definitions are broadly compatible, and any differences are not material here. *Personally identifiable information* is an equivalent, if non-statutory term.

¹⁵⁴ A *major information system* is a system or project that requires special management attention because of its (i) importance to the agency mission; (ii) high development, operating and maintenance costs; (iii) high risk; (iv) high return; or (v) significant role in the administration of an agency’s programs, finances, property or other resources. *Id.* at Attachment A, II.A.d & II.C.b.2.

¹⁵⁵ The OMB E-Government memo tells agencies that they may choose to conduct a PIA when developing a Privacy Act System of Records because the “PIA and SOR overlap in content.” Agencies may also make the PIA publicly available in the Federal Register along with the Privacy Act system of records notice. *Id.* at Attachment A, II.E.a & b.

¹⁵⁶ Some agencies manage to complete PIAs for simple activities in a page or two. Other agencies that engage in activities with significant privacy implications may conduct extensive PIAs, sometimes in multiple stages. For examples of the latter, see the Department of Homeland Security, *Inventory of Privacy Impact Assessments*, <http://www.dhs.gov/privacy-office-privacy-impact-assessments-pia>.

undertaking a new electronic information collection may conduct and submit the PIA to OMB and make it publicly available as part of a request to OMB to approve a new information collection.¹⁵⁷

Other noteworthy elements of the E-Government Act include the following:

- PIAs require approval by a reviewing official, typically the agency CIO.¹⁵⁸
- The agency must generally make a PIA public.¹⁵⁹
- The E-Government Act requires an agency to have a privacy policy on its websites that explains agency information-handling practices for the website.¹⁶⁰

If a crowdsourcing activity has its own separate website, it may be able to borrow much of the content of the agency's general website, with a slight modification to address the specific activity, even if only to say that the crowdsourcing website or the crowdsourcing activity collects no personally identifiable information. If a crowdsourcing activity collects personal information in some fashion, the appropriate website privacy policy should comprehensively covers all relevant privacy issues. **It should not be difficult to write a website privacy policy using the agency's general web privacy policy and Privacy Act of 1974 materials for guidance.** A website privacy policy by itself does not fulfill applicable requirements of the Privacy Act of 1974, requirements that the next section reviews.

OMB provided a model PIA for an agency using third-party websites and applications.¹⁶¹ The model PIA is useful for an agency accomplishing crowdsourcing through a third-party website. The model PIA also applies in part to other web-based crowdsourcing activities. **Of course, borrowing ideas and language from PIAs developed by other programs or other agencies for similar activities is a time-honored way to simplify the process.**

III. Privacy Act of 1974

The Privacy Act of 1974 is an important privacy law applicable to all federal agencies.¹⁶² The law also applies to some federal contractors that maintain personal records for an agency to accomplish an agency function.¹⁶³ The Privacy Act does not apply to agency grantees, state or local government, recipients of federal funds, or the private sector.

¹⁵⁷ Office of Management and Budget, *Memorandum for Heads of Executive Departments and Agencies, OMB Guidance for Implementing the Privacy Provisions of the E-Government Act of 2002* at Attachment A, II.D.a (2003) (OMB-M-03-22), http://www.whitehouse.gov/omb/memoranda_m03-22/.

¹⁵⁸ *Id.* at Attachment A, II.C.1.1.

¹⁵⁹ *Id.* at Attachment A, II.C.3.

¹⁶⁰ *Id.* at Attachment A, III. Also relevant is OMB Memorandum of June 25, 2010, M-10-22, http://www.whitehouse.gov/sites/default/files/omb/assets/memoranda_2010/m10-22.pdf.

¹⁶¹ Office of Management and Budget, Memorandum for the Chief Information Officers, *Model Privacy Impact Assessment for Agency Use of Third-Party Websites and Applications* (2011), http://www.whitehouse.gov/sites/default/files/omb/inforeg/info_policy/model-pia-agency-use-third-party-websites-and-applications.pdf.

¹⁶² 5 U.S.C. § 552a, <http://www.law.cornell.edu/uscode/text/5/552a>. For a detailed review of case law about the Act, see Department of Justice, *Overview of the Privacy Act of 1974 2012 Edition* (updated regularly), <http://www.justice.gov/opcl/overview-privacy-act-1974-2012-edition>.

¹⁶³ 5 U.S.C. § 552a(m), <http://www.law.cornell.edu/uscode/text/5/552a>.

The Privacy Act broadly implements fair information practices, which are general principles for the protection of the privacy of personal information.¹⁶⁴ The rights of data subjects under the Privacy Act include transparency (largely through Federal Register notices), a right of access to their records, and a right to seek correction of the records. The Privacy Act imposes on agencies a series of privacy and records management requirements as well. **The primary challenge for crowdsourcing is determining whether an activity creates a system of records, which triggers a series of specific obligations.**¹⁶⁵

A. Does the Privacy Act of 1974 Apply?

Most of the Privacy Act of 1974's requirements apply to *systems of records* maintained by federal agencies.¹⁶⁶ Understanding the concept of a system of records is central to understanding the Privacy Act's applicability. A system of records is a group of records controlled by an agency "from which information *is retrieved* by the name of the individual or by some identifying number, symbol, or other identifying particular assigned to the individual."¹⁶⁷ Three features of this definition are noteworthy here.

First, the test for whether a collection of records is a system is a *factual* test. An agency must actually retrieve records by an individual identifier for a collection of records to qualify as a system of records. It is unusual for a determination about the applicability of a law to turn on a wholly factual question of this type, but it does here. The retrievability test offers a way to "escape" the Privacy Act of 1974. For example, if a collection of records includes the cell phone number of the individual who reported the information (and no other identifying information), but the agency never retrieves records by cell phone number, the collection of records is not a system of records for the purposes of the Privacy Act of 1974. On the other hand, if an agency collects an email address and uses the address to communicate with the volunteer, the agency retrieves the address, and there is thus a system of records.

Second, a record is any information about an individual including, but not limited to, the individual's "education, financial transactions, medical history, and criminal or employment

¹⁶⁴ See generally, Robert Gellman, *Fair Information Practices: A Basic History* (February 11, 2015), <http://bobgellman.com/rg-docs/rg-FIPshistory.pdf>. The Privacy Act of 1974 imposes processing rules for most personal records that federal agencies maintain. The Act still applies fully if an agency maintains information that individuals voluntarily provide. Each federal agency owes an obligation to the public to describe how it processes personal information.

¹⁶⁵ The Privacy Act of 1974 allows agencies to exempt some systems of records from many or some of the provisions of the Act, but no system is entirely exempt. None of the exemptions is likely to be available to any crowdsourced activity. 5 U.S.C. § 552a(j) & (k), <http://www.law.cornell.edu/uscode/text/5/552a>.

¹⁶⁶ Some courts have applied some of the Act's provisions outside of the system of records context. Most notable here is the Act's provision that bans an agency from maintaining any record "describing how any individual exercises rights guaranteed by the First Amendment unless expressly authorized by statute or by the individual about whom the record is maintained or unless pertinent to and within the scope of an authorized law enforcement activity." 5 U.S.C. § 552a(e)(7), <http://www.law.cornell.edu/uscode/text/5/552a>. See *Albright v. United States*, 631 F.2d 915 (D.C. Cir. 1980). This restriction, which applies broadly to all federal agencies, is not likely to be relevant to federal agency crowdsourcing, but if it is, the provision allowing maintenance may be satisfied with the express authorization of the data subject.

¹⁶⁷ 5 U.S.C. § 552a(a)(5), (emphasis added), <http://www.law.cornell.edu/uscode/text/5/552a>.

history” that contains the individual’s “name, or the identifying number, symbol, or other identifying particular assigned to the individual, such as a finger or voice print or a photograph.”¹⁶⁸ In some cases, applying the definition of an individual identifier produces uncontroversial results. For example, **a cell phone number or email address is an individual identifier**. In other cases, there may be disagreement about whether and when information qualifies as an individual identifier. For example, there is disagreement about whether an IP address is an identifier.

Whether a particular item of information is about an individual can depend on context. A street address is not necessarily an individual identifier, but a street address might be an identifier in a list of homes owned and occupied by single individuals. A set of GPS coordinates is not normally an individual identifier. A photograph is an individual identifier, but a collection of individual photographs (without additional information) is a system of records only if the agency maintaining the records retrieves the photographs (e.g., using facial recognition technology) to find individuals.

Third, the retrievability standard for defining a system of records is largely meaningless with today’s information technology. Typically, standard electronic search facilities on any computer allow retrievability of a record using any element in any compilation of information. **Agencies should assess retrievability in good faith based on expected and actual use of records**. While somewhat obsolete, the system of records concept remains in the law and applicable in the Privacy Act of 1974.

B. How Might the Privacy Act of 1974 Apply to Crowdsourcing?

There are three general classes of individuals whose personal information might be part of federal agency crowdsourcing and that might result in the creation of a system of records.

First, crowdsourcing might include personal information about volunteers who participate in the crowdsourcing activity. If an agency asks each volunteer to register in a way that provides personal information about the volunteer, then there is a good chance that the agency would retrieve the information by an identifier, and a system of records would result. **If the agency approves volunteers, trains them, or provides reimbursement of expenses, the agency will almost certainly retrieve the information by individual identifier to carry out these functions. A system of records results from those activities.**

If the agency collects and maintains personal information (e.g., name or cell phone number) as part of data collection, there is a greater likelihood of creating a system of records. For example, if each report about a bird sighting includes the name or cell phone number of the reporter, and if the agency uses that name or number for data organization and retrieval, then a system of records exists. On the other hand, if an activity does not require any personal information about volunteers, the agency may have no Privacy Act of 1974 obligations. If an agency collects personal information but only organizes and retrieves the information by subject or by date, there is no Privacy Act system of records.

¹⁶⁸ 5 U.S.C. § 552a(a)(4), (definition of record) <http://www.law.cornell.edu/uscode/text/5/552a>.

The Privacy Act directs that each agency maintain only personal information that is “relevant and necessary” to accomplish an agency purpose.¹⁶⁹ This standard allows an agency considerable leeway in deciding what personal information to keep, but if the agency can carry out its mission without collecting personal information, then it should not collect the information. **For example, consider a cell phone app that transmits wholly non-personal information to the agency. If the agency does not keep records of who downloaded the app, the resulting reports will not create a system of records because the agency collects no personal information at all.**

When an agency collects information directly from an individual for a system of records, the agency must provide the individual a so-called *Privacy Act notice*. The notice must inform the individual “on the form or on a separate form that can be retained by the individual” of the authority for the collection, the principal purpose for which the information will be used, how the information will be disclosed (“routine uses”), and the consequences of not providing the information.¹⁷⁰ The requirement that an agency provide a Privacy Act notice applies when volunteers disclose personal information. One way to meet the notice requirement is to provide a link to a notice during the registration of volunteers.

Methods that do not require maintenance of a system of records under the Privacy Act of 1974

1. Do not collect or maintain any personal information.
2. For personal information collected and maintained, do not retrieve any record by personal identifier. This can be harder to guarantee when personal information is part of any organized data system because retrieval can occur even if not originally intended or if changes to the system result in unanticipated retrieval.
3. Assign a unique identifier without a link to the individual. For example, consider a crowdsourcing activity that assigns a unique number (e.g., sequence number) to each volunteer. The number allows for finding duplicate reports or associating all reports from the same individual, but the individual is not identified. If the agency does not have any way to link the unique number to a known individual, there is no record (no *identifying* number assigned to the individual) and therefore no system of records.
4. Use encryption. Encrypting identifying information so that the encryption cannot be defeated or the individual otherwise identified will not result in a record that requires a system of records. Using encryption may require technical expertise as some encrypted data may be readily identified. For example, Social Security Numbers hashed using a one-way function may still be identifiable. It is possible to associate a hashed number with a known individual by hashing all possible numbers and then looking up a particular hashed value in the resulting table to find the original number.

¹⁶⁹ *Id.* at § 552a(e)(1).

¹⁷⁰ *Id.* at § 552a(e)(4).

Second, a crowdsourcing activity may collect information about individuals who are not participants in the activity. A recent Woodrow Wilson Center report offers an example of crowdsourcing activities focused on third-party information in the context of identifying missing persons after natural disasters.¹⁷¹ Many organizations, using social media and otherwise, collect information from various sources about individuals in areas affected by earthquakes, hurricanes, or similar disasters and make that information available to relatives. Some federal agencies coordinate missing persons activities, and the report reviews how the Privacy Act of 1974 affects agency information collection and dissemination activities.

The collection of personal information (other than about voluntary participants) through crowdsourcing is not an activity that should be undertaken lightly. The Privacy Act of 1974 imposes some substantive restrictions. An agency must collect information “to the greatest extent practicable” from the data subject when the information may result in an adverse determination about rights, benefits, or privileges.¹⁷² Because a crowdsourcing activity is not likely to use collected information to make decisions about individuals, this may not be a significant limitation. Nevertheless, an agency should consider possible uses of information when planning a Privacy Act system of records.

There are other Privacy Act requirements as well. An agency collecting information from an individual must inform the individual about the purpose and authority of the collection through a Privacy Act notice, as discussed above.¹⁷³ How or if this particular provision might apply to crowdsourcing will depend on the circumstances of the collection and the nature of the contact with the volunteer. Another requirement of the Privacy Act is to establish appropriate administrative, technical, and physical safeguards for security.¹⁷⁴ This is a multifaceted requirement that applies broadly to agency activities and will likely be satisfied in the same way as with other agency information technology systems.¹⁷⁵ The Privacy Act also requires agencies to establish rules of conduct and instruction for persons involved in the “design, development, operations, or maintenance” of any system of records.¹⁷⁶ **Applying this obligation in a crowdsourcing context also requires careful thought because volunteers may occasionally have a role in designing, developing, operating, or maintaining a system of records.** Finally, the Privacy Act restricts the ability of an agency to maintain a record about how any individual exercises rights guaranteed by the First Amendment, as mentioned earlier.¹⁷⁷ Exceptions for some law enforcement activities and activities expressly authorized by statute are not likely to be

¹⁷¹ Joel R. Reidenberg, Robert Gellman, Jamela Debelak, Adam Elewa, & Nancy Liu, *Privacy and Missing Persons after Natural Disasters* (Commons Lab, Woodrow Wilson International Center for Scholars, Policy Series Vol. 2 & Center on Law and Information Policy, Fordham Law School, 2013),

<http://www.wilsoncenter.org/publication/privacy-and-missing-persons-after-natural-disasters>.

¹⁷² 5 U.S.C. § 552a(e)(2), <http://www.law.cornell.edu/uscode/text/5/552a>

¹⁷³ *Id.* at § 552a(e)(4).

¹⁷⁴ *Id.* at § 552a(e)(10).

¹⁷⁵ A separate law and guidance under that law impose detailed security obligations on federal agencies. Federal Information Security Management Act of 2002, 44 U.S.C. Chapter 35, Subchapter III (Information Security), <http://www.law.cornell.edu/uscode/text/44/chapter-35/subchapter-III>.

¹⁷⁶ 5 U.S.C. § 552a(e)(9), <http://www.law.cornell.edu/uscode/text/5/552a>.

¹⁷⁷ *Id.* at § 552a(e)(7).

relevant to crowdsourcing. An exception for activity “expressly authorized” by a data subject may be relevant, but it may not be simple to obtain *express* authorization.

In addition to these obligations, when a federal agency activity maintains information about individuals, the Privacy Act of 1974 defines the agency’s obligations with respect to the subjects of the records. These include providing access and correction rights. The Privacy Act does not require consent for the collection and maintenance of personal information provided that the maintenance is “relevant and necessary” to accomplish an agency purpose.¹⁷⁸ This is a broad standard that by itself should not impede any activity that an agency considers to be within its mission.

What these obligations suggest is that using crowdsourcing to collect personal information about individuals other than volunteers is complicated, includes a series of specific obligations, and has a degree of uncertainty. Any agency considering a crowdsourced data collection activity needs to undertake careful planning and consultation with privacy officers and legal staff well in advance if, for example, volunteers will be collecting and providing information about other individuals.

Third, a system of records for a crowdsourcing activity might include information about agency employees participating in the activity. This type of system of record will be no different from any other system of records about federal employees.

C. What if the Privacy Act Applies?

The previous section describes generally the substantive obligations that attach to an agency collection of personal information in a system of records. In addition, there are a set of procedural and publishing requirements.

An agency must describe in the Federal Register each system of records in a *system of records notice*, commonly called a SORN. A typical SORN describes sixteen elements of the system of records, including name; categories of individuals on whom records are maintained; categories of records maintained; routine uses; policies for storage, retrieval, access controls, retention, and disposal; title and address of the responsible agency official; procedures an individual must follow to learn if the system contains a record about himself or herself and procedures for exercising rights of access and correction; and categories of sources of records.¹⁷⁹ An agency must also send a notice of a new or substantially changed system of records to OMB and to Congress.¹⁸⁰

Writing a SORN might appear a daunting activity, but many of the elements tend to be the same in most SORNs within an agency. For a well-planned crowdsourcing activity, most of the descriptive elements specific to the activity should be directly available from materials already developed within the agency. **The description will use much of the same information for preparing for compliance with the information collection clearance process of the**

¹⁷⁸ *Id.* at § 552a(e)(1).

¹⁷⁹ *Id.* at § 552a(e)(4).

¹⁸⁰ *Id.* at § 552a(r).

Paperwork Reduction Act. Other elements can usually be readily copied or adapted from other agency SORNs.

For those not versed in the Privacy Act of 1974, writing the routine uses is the hardest part of drafting a SORN. A routine use is a term of art describing the disclosure of a record outside the agency that maintains the system of records.¹⁸¹ The disclosure authorized by a routine use may not be “routine” but rather a disclosure anticipated to be appropriate in the future. Some routine uses tend to be standard within an agency and, to a certain extent, across agencies. The essential feature of a routine use is that a published SORN must describe the proposed disclosure or the agency cannot lawfully disclose a record for that purpose.¹⁸² This means that all appropriate disclosures must be thought out in advance and properly described. Looking at other SORNs helps to identify many standard disclosures. Appendix B includes an existing SORN that covers, in part, a crowdsourcing activity of the United States Geological Survey at the Department of Interior.¹⁸³

For a new (or significantly changed) system of records, the agency must publish a SORN in the Federal Register.¹⁸⁴ New routine uses also require a Federal Register publication.¹⁸⁵ An agency must ask for and consider public comments, but the Privacy Act of 1974 does not require the more elaborate notice-and-comment process called for under the Administrative Procedure Act.¹⁸⁶ The law also requires notice to OMB and Congress.¹⁸⁷ **All required notices and publications under the Privacy Act of 1974 and under the Paperwork Reduction Act can be coordinated so that the comment periods run concurrently.**

IV. Other Potential Privacy Laws and Concerns

A. COPPA

The Children’s Online Privacy Protection Act of 1998 (COPPA)¹⁸⁸ regulates the collection, maintenance, use, and disclosure of individually identifiable personal information obtained online from children under the age of 13. COPPA applies to any commercial operator of a

¹⁸¹ *Id.* at § 552a(a)(7), (definition of routine use). In modern privacy parlance, a *use* typically means within the organization that maintains a record, and a *disclosure* is to someone outside the organization. The term *routine use* is inconsistent with modern terminology in that it refers to external disclosures and not internal uses. Controversy over the proper definition of routine uses dates back to the early days of the Act and continues. See, for example, Privacy Protection Study Commission, *Personal Privacy in an Information Society* 515-516 (1977), <https://epic.org/privacy/ppsc1977report/>. The controversy is beyond the scope of this report. Each agency has its own patterns and practices, and those within an agency should follow the lead of their own privacy officers.

¹⁸¹ The SORN is an example and not necessarily a model for others.

¹⁸² Other parts of the Privacy Act of 1974 include authority for some disclosures as well. See 5 U.S.C. § 552a(b), <http://www.law.cornell.edu/uscode/text/5/552a>.

¹⁸³ The SORN is an example and not necessarily a model for others.

¹⁸⁴ 5 U.S.C. § 552a(e)(4) & (11), <http://www.law.cornell.edu/uscode/text/5/552a>.

¹⁸⁵ *Id.* at § 552a(e)(11).

¹⁸⁶ 5 U.S.C. § 553, <http://www.law.cornell.edu/uscode/text/5/553>.

¹⁸⁷ 5 U.S.C. § 552a(r), <http://www.law.cornell.edu/uscode/text/5/552a>. OMB wants notice 60 days before an effective date. Office of Management and Budget, *Privacy Act Implementation, Guidelines and Responsibilities*, 40 Federal Register 28948 (July 9, 1975),

http://www.whitehouse.gov/sites/default/files/omb/assets/omb/inforeg/implementation_guidelines.pdf.

¹⁸⁸ 15 U.S.C. § 6501, <http://www.law.cornell.edu/uscode/text/15/6501>.

website or online service directed to children, or to any operator with actual knowledge that it is collecting or maintaining personal information from a child.¹⁸⁹ Nominally, COPPA does not apply to federal websites. However, it is a matter of OMB policy that all federal websites and contractors operating on behalf of agencies must comply with COPPA standards when collecting personal information online at websites directed to children.¹⁹⁰

While it is unlikely that most crowdsourcing activities would collect information from children as defined in COPPA, an activity conducted in association with a scout troop or school could result in the online collection of personal information (name, telephone number, email address, etc.) from children. If so, then compliance with COPPA is necessary.

COPPA has three basic requirements. First, an agency must post a notice of information collection practices that tells parents about the purpose and nature of the information collection. Second, an agency must obtain verifiable parental consent for the collection. Third, an agency must provide a parent with a right of access and correction for the personal information.

An agency that complies with the Privacy Act of 1974 and other privacy requirements for websites will have little difficulty meeting most of the COPPA requirements, with a few additions to notices otherwise required. However, obtaining verifiable parental consent is more complex and calls for careful selection of a verification process and compliance with Federal Trade Commission implementation rules for COPPA.¹⁹¹ The best response is to avoid collecting personal information about children altogether, thereby avoiding the associated complexities. Regardless of any COPPA obligations, it may be prudent to consider the need for parental consent in any activity (whether it collects personal information or otherwise) involving minor children of any age.

B. FERPA

The Family Educational Rights and Privacy Act (FERPA)¹⁹² establishes privacy rules for schools and universities that receive federal funds through the Department of Education. The law covers *education records* that contain information directly related to a student. FERPA establishes rules governing collection, use, disclosure, access, and correction. FERPA charges the Secretary of Education with enforcement responsibilities. Unless a federal agency operates a school, FERPA does not apply to the agency.

However, if an agency works cooperatively with a school or university on a crowdsourcing activity, the agency may run into FERPA issues. FERPA obligations fall directly on schools,

¹⁸⁹ 16 C.F.R. § 312.3, <http://www.law.cornell.edu/cfr/text/16/312.3>.

¹⁹⁰ Office of Management and Budget, Memorandum for Heads of Executive Departments and Agencies, Privacy Policies and Data Collection on Federal Web Sites (2000) (M-00-13), http://www.whitehouse.gov/omb/memoranda_m00-13/. See also Office of Management and Budget, Memorandum for Heads of Executive Departments and Agencies, *OMB Guidance for Implementing the Privacy Provisions of the E-Government Act of 2002* at Attachment C (2003), http://www.whitehouse.gov/omb/memoranda_m03-22/.

¹⁹¹ 16 C.F.R. Part 312, <http://www.ftc.gov/enforcement/rules/rulemaking-regulatory-reform-proceedings/childrens-online-privacy-protection-rule/>.

¹⁹² 20 U.S.C. §1232g, <http://www.law.cornell.edu/uscode/text/20/1232g>. See also 34 C.F.R. Part 99, <http://www.law.cornell.edu/cfr/text/34/part-99>.

but FERPA obligations may also apply to student information shared with an outside entity depending on the relationship between the entity and the school. Schools may share *directory information* (e.g., name, grade, address, email address) about students freely, and the recipient has no legal obligations under FERPA with respect to the information.¹⁹³

If a school discloses non-directory student information to a school contractor performing institutional services or functions for the school, FERPA obligations may fall on the contractor.¹⁹⁴ A disclosure for an education program comes with different obligations.¹⁹⁵ The relationship between the recipient and the school and the purpose of the disclosure determine whether the recipient has an obligation under FERPA to protect the data. Disclosures made with express parental consent may not create FERPA obligations.¹⁹⁶ The facts make a difference to the application of legal requirements, and the possibilities are too diverse to generalize.

The obligations of FERPA fall on schools. If any obligations fall on a federal agency undertaking a crowdsourcing activity with a school, it is largely up to the school to determine what obligations fall on the agency and to tell the agency what those obligations are.¹⁹⁷ Identifiable student (or teacher) records received and independently maintained by a federal agency could be subject to the requirements of the Privacy Act of 1974.

An agency working with a school will do best if it carefully reviews in advance the flow of personally identifiable records and the legal obligations that go along with the records. **The agency may be able to avoid most privacy obligations by allowing the school to maintain all personally identifiable student records and by maintaining only non-identifiable program records.**

C. HIPAA

The federal health care privacy rules¹⁹⁸ issued under the authority of the Health Insurance Portability and Accountability Act (HIPAA) will have little relevance to most federal crowdsourcing activities. For the most part, HIPAA privacy rules apply directly to covered entities, generally health care providers, health plans, and their business associates. Even if a crowdsourcing activity collects health information about individuals, HIPAA will not apply unless the agency otherwise qualifies as a provider or plan. If a HIPAA covered entity discloses health information to a non-covered entity (with or without patient consent), the recipient of the information generally has no obligation under HIPAA with respect to the information.

It is possible that a federal agency or component covered by HIPAA will engage in crowdsourcing. Parsing the application of HIPAA can be complex because the way in which an entity covered by HIPAA organizes itself may matter. For example, a covered entity engaged in

¹⁹³ See 34 C.F.R. § 99.37, <http://www.ecfr.gov/cgi-bin/text-idx?SID=b32202e53effd70fd9fb06698cc3fd28&node=pt34.1.99&rgn=div5>.

¹⁹⁴ *Id.* at § 99.31.

¹⁹⁵ *Id.* at § 99.35.

¹⁹⁶ *Id.* at § 99.30.

¹⁹⁷ See, e.g., *id.* at § 99.33.

¹⁹⁸ 45 C.F.R. Parts 160 & 164, <http://www.ecfr.gov/cgi-bin/text-idx?SID=105b35a2b5dcc9e0e94337af5714a659&tp=/ecfrbrowse/Title45/45CsubchapC.tpl>.

health research that does not involve treatment might be a hybrid entity, with its treatment activities subject to HIPAA and its research activities not subject to HIPAA.

The possibilities are too complex and too hypothetical to cover here in detail. To some extent, the particulars do not matter much. Any federal agency that retrieves identifiable health (or other) information by identifier must comply with the Privacy Act of 1974 because HIPAA does not preempt strong state or federal privacy laws. **Note that many provisions of the Privacy Act are more protective of privacy than is HIPAA.**

D. Security Breach Notification

In 2007, OMB ordered agencies to develop a policy for safeguarding personally identifiable information (PII) and for responding to a security breach of that information.¹⁹⁹ By now, each agency should have a policy in place describing how the agency will respond in the event of unauthorized access to or disclosure of PII. The policy of NASA provides an example.²⁰⁰

For any crowdsourcing activity that collects and maintains PII, the possibility exists that a security breach may expose personal information to unauthorized individuals. Responding to a security breach can be a difficult and expensive activity that requires much effort to be completed quickly. For an agency with an established policy, the activities and responsibilities should be clearly established. In the absence of an incident that requires implementation of the breach policy, there may be little additional effort required of agency personnel responsible for crowdsourcing. The normal obligations of meeting agency information security guidelines and controlling the use and disclosure of PII should be sufficient, along with an awareness that security breaches will give rise to additional efforts, costs, and embarrassment when they occur. Agency personnel involved with crowdsourcing should be aware of the need to contact the agency's security breach team in the event of a breach.

E. International Privacy Issues

Most other countries around the world have national privacy laws broadly applicable to government and private sector record keepers. The United States does not have a comparable law. Privacy laws in other countries generally have little direct relevance to federal agency activities.

Privacy laws in other countries sometimes impose limits on the export of personal information to a third country. The leading examples are the national data protection laws that implement the European Union's Data Protection Directive.²⁰¹ Exporting personal data from a European Union

¹⁹⁹ Office of Management and Budget, Memorandum for Heads of Executive Departments and Agencies, *Safeguarding Against and Responding to the Breach of Personally Identifiable Information* (2007) (OMB-M-07-16), <http://www.whitehouse.gov/sites/default/files/omb/assets/omb/memoranda/fy2007/m07-16.pdf>.

²⁰⁰ National Aeronautics and Space Administration, *Information Technology Requirement, Personally Identifiable Information (PII) Breach Response Policy* (2007), (NITR 1382-1) <http://www.nasa.gov/pdf/207137main ITS-NITR-1382-1%20-%20Privacy%20Policy%20for%20PII%20Breach%20Notification-1.pdf>.

²⁰¹ European Union, *Council Directive 95/46, On the Protection of Individuals with Regard to the Processing of Personal Data and on the Free Movement of Such Data*, Articles 25 & 26, 1995 O.J. L 281 at 31, 47, <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31995L0046:EN:HTML>.

Member State to the United States can be difficult. The only exception to the prohibition on data exports relevant to crowdsourcing is the “unambiguous consent” of the data subject.

In a crowdsourcing context, a privacy law in another country may need some attention if a federal agency undertaking an activity involving the collection of personal information solicits participation by individuals living abroad. It would be appropriate for the project’s privacy policy to advise participants that their information will be stored in the United States and subject to different privacy rules than apply in their home country. A proper notice and consent process supports data export with the required unambiguous consent.

In the case of a federal agency crowdsourcing project where the agency has a partner or collaborator in another country, the issue of transborder flow of personal information requires careful attention. If a participant discloses personal information to an entity in the participant’s home country, it may be challenging to find a legal basis to export that information to the United States. However, because US law does not generally restrict the export of personal data, it may be more practical for personal data of US and foreign participants to be held abroad and analyzed abroad. That alternative may be undesirable for other reasons, however. Privacy rules do not restrict the export of non-personal information.

Generally, where the transborder transfer of personal information is part of a crowdsourcing activity by a federal agency, the agency should carefully evaluate the privacy laws and consequences in advance. Privacy laws are not likely to impose barriers to crowdsourcing, but the laws may offer a reason to structure the project differently in order to avoid complications.

F. Federal Records Act and the FOIA

Both the Federal Records Act²⁰² and the Freedom of Information Act²⁰³ (FOIA) have rules that may affect the collection, dissemination, and destruction of federal crowdsourced records. There are no special provisions in either law about crowdsourcing, but the laws affect crowdsourced records in the same way as they do other federal agency records.

The Federal Records Act requires that each federal agency make and preserve records that (1) document the organization, functions, policies, decisions, procedures, and essential transactions of the agency and (2) furnish the information necessary to protect the legal and financial rights of the government and of persons directly affected by the agency’s activities.²⁰⁴ Most noteworthy here among the Federal Records Act’s other general records management requirements is the provision requiring each agency to obtain the approval of the Archivist of the United States before disposing of agency records.²⁰⁵ Permission for record disposal typically comes through the approval by the Archivist of a *records disposal schedule* negotiated with an agency. **Each agency has a records officer who assists program offices to comply with the Federal Records Act. Before disposing of records from crowdsourcing, the sponsor should ask the agency records officer for assistance.**

²⁰² 44 U.S.C. chapters 29, 31, & 33, <http://www.law.cornell.edu/uscode/text/44>.

²⁰³ 5 U.S.C. § 552, <http://www.law.cornell.edu/uscode/text/5/552>.

²⁰⁴ 44 U.S.C. § 3101, <http://www.law.cornell.edu/uscode/text/44/3101>.

²⁰⁵ 44 U.S.C. § 3303, <https://www.law.cornell.edu/uscode/text/44/3103>.

Among other things, the Freedom of Information Act requires each federal agency to respond to requests for copies of federal records.²⁰⁶ An agency can withhold a record on various grounds, including if disclosure of a personnel or medical file or similar file would constitute a clearly unwarranted invasion of personal privacy.²⁰⁷ A crowdsourcing record might fall under the FOIA's privacy exemption to the extent that it reflects personal information about a volunteer or agency employee. There may well be circumstances in which an information collection with political sensitivities might generate a request for the collected information as well as the name of the volunteer who collected the information.

Given the broad range of crowdsourcing activities, it is difficult to say that other FOIA exemptions would never apply, but application of other exemptions may be less likely. The purpose of the activity and the circumstances of data collection will make a difference. Like the Federal Records Act, the FOIA is a "housekeeping" law applicable broadly to all federal programs. Any federal program may become the subject of a FOIA request, and a program might give some mild consideration to organizing its records in a way that would simplify a response to a request. Each agency has a FOIA officer to help with compliance. However, the federal government has many records that an agency must disclose if requested under the FOIA, and few of those records ever become the subject of a FOIA request. Except in cases where it appears highly likely that crowdsourced records are controversial in some way, it may not be necessary to undertake any significant preparation for the possibility of a FOIA request for the records. Affirmative disclosure of records may be appropriate for many activities, and that might obviate the need to process FOIA requests while sharing useful information with the public. Affirmative disclosure may raise requirements under each agency's policy for implementing the Information Quality Act, but not disclosures in response to FOIA requests.

V. Strategies for Progress

Privacy laws suffer from many shortcomings, including being out of date. The Privacy Act of 1974 has long been recognized as needing major reform. Change seems unlikely in the near term, but there is little in the Privacy Act or in the privacy arena generally that needs adjustment to accommodate crowdsourcing. Privacy laws impose procedural and administrative requirements that any federal agency knows how to meet already. The obligations just take time and attention, and an agency can accomplish them while other prerequisites to crowdsourcing are in process.

Better understanding of privacy is always useful, and those who have written Privacy Impact Assessments and Privacy Act of 1974 SORNs can educate others about the requirements. Sharing of completed documents within and among agencies is also valuable.

One way that some agencies might simplify compliance with the Privacy Act of 1974 is by defining one system of records that covers all crowdsourcing activities generically. Agencies have considerable discretion when they define the scope of a system of records. Rather than have a separate system for each crowdsourcing project, an agency could establish a system of records

²⁰⁶ 5 U.S.C. § 552(a)(3), <http://www.law.cornell.edu/uscode/text/5/552>.

²⁰⁷ *Id.* at § 552(b)(6).

covering most or all crowdsourcing projects. For agencies that do crowdsourcing in different components, one system for each component is another possibility. Either way, it would simplify the obligations of any new project. A carefully designed system might only require a short Federal Register notice to accommodate a new project. While each project might still require its own privacy impact assessment, most PIAs for crowdsourcing by the same agency are likely to be short and easily done. An agency might develop a template for PIAs that would take little time to adjust for each new project.

Those developing crowdsourcing activities do not have to face these issues alone. Every agency has a Privacy Act officer who has experience with the law and the policy surrounding the use of personal information. Anytime there is even a hint of a privacy issue with crowdsourcing, the Privacy Act officer should be the first person called.

Terms of Service for Mobile Apps

When federal agencies develop mobile applications (apps) for use by those engaged in crowdsourcing, they typically use online facilities and services that operate under terms of service established by private companies. Federal law may not allow agencies to accept standard terms of service that cover indemnification of service providers, choice of application law, and arbitration. Agencies and service providers have been working together to develop terms of service that federal agencies can accept.

I. Introduction

Many activities in the digital age involve the use of online facilities and services—sometimes for a price and sometimes at no cost to the user—offered by a remote provider under end-user license agreements (EULA) or other terms and conditions established by the provider. A provider could be a website, a social networking site, an app store, or almost anyone else on the Internet. It is common for a website to include a link to the provider’s privacy policy and terms of service (TOS). The extent to which users read and pay attention to a website’s rules and operating conditions is beyond the scope of this report, as is the ultimate legal effect of “clickwrap” agreements between websites and users. However, using an online facility, downloading something from a website, or just clicking on a link has the potential to create a contractual relationship between the website and the user.

A federal agency operates under laws and restrictions that differ in some material respects from the laws applicable to other users of Internet facilities and services. The difference can be important when a federal worker uses an Internet website that offers the same terms to all users. As will be clear from the discussion here, a federal worker, whether acting in the capacity of a user or of a developer of mobile applications, may not have the ability to agree to standard website terms of use. Independently, some standard terms may not be applicable to the federal government as a matter of law. These limitations arise in many different types of Internet activities regularly used by federal employees, whether the activities relate to crowdsourcing or otherwise.

In a crowdsourcing context, mobile applications developed by or for federal agencies offer an excellent example of the legal issues that surround Internet activities. The discussion of the legal issues here focuses on mobile apps used for crowdsourcing. When agencies develop mobile applications for use in crowdsourcing, they develop relationships with app providers that differ from the relationships between app providers and users of apps.

Example of a Mobile App: The National Broadband Map

In 2009, Congress directed the Federal Communications Commission (FCC) to produce an interactive and searchable map detailing broadband availability nationwide. The FCC used multiple mechanisms to assess consumer Internet use and the strength of the connections. A mobile app provided one method for determining Internet speed tests. The FCC mobile software application used a free, off-the-shelf third-party product that measures upload speed, download speed, latency, and other aspects of an Internet connection. The FCC distributed the app early in 2010, and millions of smartphones then sent the FCC the results of speed tests and the geographic locations of the tests. This crowdsourcing activity helped the FCC build its National Broadband Map.[†]

[†] Zachary Bastian and Michael Byrne, *The National Broadband Map: A Case Study on Open Innovation for National Policy* (Woodrow Wilson International Center for Scholars, 2012), <http://www.wilsoncenter.org/event/the-national-broadband-map-case-study-open-innovation-for-national-policy>.

A mobile app is a computer program designed to run on a smartphone, tablet, computer, or other similar device. When an agency develops a mobile app for a crowdsourcing activity, it is likely to act as other developers do. The agency typically develops its app for a particular device and uses tools provided by the platform that supports the device to build the app. Thus, an app aimed at Android devices will likely use the Android Software Development Kit.²⁰⁸ When an app is ready for public release, the agency commonly distributes the app through the application distribution platform operated by the owner of the mobile operating system.²⁰⁹ Examples of distribution platforms include the Apple App Store, Google Play, and Windows Phone Store.

Each distribution platform operates under its own terms of service, licensing rules, and other policies. Google Play has developer program policies that address the content of apps, ad policy, and other terms.²¹⁰ Google Play also has a separate developer distribution agreement that defines the terms of distribution and the contractual relationship between Google Play and the developer.²¹¹ **While the policies and contractual terms vary from platform to platform, viewed from a high enough level of generality, they are very similar.** App developers accept the terms of the platforms that they use, and there is typically little opportunity for negotiation or alteration of the standard terms.

For an agency operating under the restrictions of federal law, the standard terms for app distribution create conflicts with the law and with federal policy. The purpose of this section is to describe the major conflicts likely to arise with those using apps for crowdsourcing and the ways

²⁰⁸ See <https://developer.android.com/sdk/index.html>.

²⁰⁹ Some platforms use different policies when they allow app developers to build and distribute a private app. The same indemnification issue is likely to arise with a private app should a federal agency develop one.

²¹⁰ *Google Play Developer Program Policies*, Google Play, <https://play.google.com/about/developer-content-policy.html#showlanguages>.

²¹¹ *Google Play Developer Distribution Agreement*, Google Play (September 25, 2014), <https://play.google.com/about/developer-distribution-agreement.html>.

in which agencies address those conflicts. As will be clear, some platforms have shown a willingness to amend their standard TOS to meet federal government limitations.

The lesson for agency crowdsourcers (and their lawyers and contracting officers) is that there are solutions for the TOS conflicts, with helpful resources already available. For agencies wishing to implement crowdsourcing through a mobile application, the problems are real but surmountable with effort and cooperation from inside and outside the government. There is also a broader context here. Federal agencies have TOS issues with websites and social media sites for many other activities that extend beyond the issues for mobile applications outlined here. Over time, there will be additional developments, technologies, and issues that will need attention from federal agency crowdsourcers.

Part II of this chapter describes major legal issues, and Part III of this chapter outlines available resources for addressing these issues.

II. Selected TOS Legal Issues for Mobile Apps

A. Indemnification and the Antideficiency Act

An earlier section of this report discusses the history and content of the Antideficiency Act largely in the context of the acceptance of voluntary services by federal agencies. The Act generally prevents federal officials (1) from making an expenditure in excess of existing funding and (2) from promising to pay in the future for goods or services in advance of an appropriation.²¹²

Standard terms of service set by distribution platforms for app developers address indemnification of the platform by the app developer. Google's indemnification provision serves here as a typical example for app developers (the "you" in the language):

13. Indemnification

13.1 To the maximum extent permitted by law, you agree to defend, indemnify and hold harmless Google, its affiliates and their respective directors, officers, employees and agents, and Authorized Carriers from and against any and all third party claims, actions, suits or proceedings, as well as any and all losses, liabilities, damages, costs and expenses (including reasonable attorney's fees) arising out of or accruing from (a) your use of the Store in violation of this Agreement, and (b) your Product that infringes any copyright, trademark, trade secret, trade dress, patent or other intellectual property right of any person or defames any person or violates their rights of publicity or privacy.

13.2 To the maximum extent permitted by law, you agree to defend, indemnify and hold harmless the applicable Payment Processors (which may include Google and/or third parties) and the Payment Processors' affiliates, directors, officers, employees and agents from and against any and all third party claims, actions,

²¹² 31 U.S.C. § 1341(a), <http://www.law.cornell.edu/uscode/text/31/1341>.

suits or proceedings, as well as any and all losses, liabilities, damages, costs and expenses (including reasonable attorney's fees) arising out of or accruing from taxes related to Your distribution of Products distributed via the Store.²¹³

The purpose of the indemnification provision is apparent. The platform wants the developer to pay any legal costs that the platform incurs because of its distribution of the developer's app.

The problem for a federal agency is that an indemnification agreement violates the Antideficiency Act if the agreement, without statutory authorization, imposes on the United States an open-ended, potentially unrestricted liability.²¹⁴ There can never be certainty that sufficient appropriated funds are available to cover the liability.

The law makes several distinctions and qualifications about the application of the Antideficiency Act that are not material here.²¹⁵ The point is that federal app developers generally may not accept contractual terms that include open-ended indemnification provisions. As OMB put it, "If the TOS for a social media product include an open-ended indemnification clause, then the agency must renegotiate the TOS with the provider or obtain another product whose TOS do not include the open-ended indemnification clause."²¹⁶

An interim rule change to the Federal Acquisition Regulation clarifies that the inclusion of an open-ended indemnification clause in a EULA, TOS, or other agreement is not binding on the federal government unless expressly authorized by law and "shall be deemed to be stricken" from the EULA, TOS, or similar agreement.²¹⁷

The Antideficiency Act can affect other online contracting by federal agencies. A clause that automatically renews a subscription or other contractual payment could violate the Antideficiency Act if it obligated the government to pay for supplies or services in advance of the agency's appropriation.²¹⁸ Antideficiency concerns are not likely to be an issue with an app distribution contract that does not involve payment by an agency for services.

²¹³ *Google Play Developer Distribution Agreement*, Google Play (September 25, 2014),

<https://play.google.com/about/developer-distribution-agreement.html>.

²¹⁴ Office of Legal Counsel, Department of Justice, *Memorandum for Barbara S. Fredericks, Assistant General Counsel for Administration, United States Department of Commerce* (2012), reprinted in OMB Memorandum of April 4, 2013, M-13-10, <http://www.whitehouse.gov/sites/default/files/omb/memoranda/2013/m-13-10.pdf>.

²¹⁵ Whether a federal employee technically violated the Antideficiency Act turns on whether the employee who entered into the agreement has contracting authority. Generally, contracting officers who enter into an unacceptable indemnification agreement violate the Act, while those without contracting authority do not violate the Act. However, in either case, the agreement is unenforceable against the federal government. *Id.*

²¹⁶ Office of Management and Budget, *Memorandum for the Heads of Executive Departments and Agencies, and Independent Regulatory Agencies, Antideficiency Act Implications of Certain Online Terms of Service Agreements* at 2 (2013) (M-13-10), <http://www.whitehouse.gov/sites/default/files/omb/memoranda/2013/m-13-10.pdf>.

²¹⁷ Federal Acquisition Regulation, *Terms of Service and Open-Ended Indemnification, and Unenforceability of Unauthorized Obligations*, 78 Federal Register 37686 (June 21, 2013), <https://www.federalregister.gov/articles/2013/06/21/2013-14614/federal-acquisition-regulation-terms-of-service-and-open-ended-indemnification-and-unenforceability>.

²¹⁸ See *id.* (the renewal issue is mentioned but not addressed substantively).

B. Choice of Law and Forum; Arbitration

Distribution platforms, like many websites, establish terms that select applicable laws and judicial jurisdictions that favor the platforms. A typical provision will specify the specific state law that governs the contract between the platform and the app developer, as well as the specific court with jurisdiction to adjudicate all legal disputes. Other clauses may require resolution of disputes through a specific type of arbitration.

All of these provisions can create difficulties for federal agencies. The federal government is generally subject to federal and not state law, and it much prefers to litigate in federal courts. Contracts are typically subject to federal law and the Federal Acquisition Regulation.²¹⁹ Arbitration provisions in a TOS may also conflict with federal policy on alternate dispute resolution. **A federal agency may not be able to agree to any terms of service relating to choice of law, court jurisdiction, or arbitration.**

C. Selected Other Legal Issues

A federal agency may have concerns about how a distribution platform uses agency seals, logos, trademarks, and the like that are inconsistent with standard practices for distribution platforms. An agency may also be concerned about the appearance of a business relationship with a distribution platform that is beyond the agency's intent.

Many websites operate under TOS that allow a website operator to change the terms at will, with or without any notice to developers or users. The capability for unlimited change may result in direct conflicts with federal standards, laws, or policies. If a distribution platform decides to change its TOS in a way that is inconsistent with federal standards, both substantive and process problems will arise.

Relationships between an agency as app developer and a platform may be simpler in many respects when the distributed app is available to users without a fee. However, the distribution of fee-based products or services creates a more complex set of issues, including the limits of federal appropriations and applicability of federal procurement rules. Both the agency and the platform may have different but significant concerns over these issues, issues that are much less likely to arise with non-governmental app developers who can more easily accept standard platform rules about fees and fee sharing.

D. Federal Responses

Both OMB and the General Services Administration (GSA) provide assistance to agencies with respect to TOS. OMB issued guidance on the Antideficiency Act and TOS in 2013, directing agencies to the *GSA Guidance for Reviewing Terms of Service for Social Media Products and*

²¹⁹ See Federal Acquisition Regulation, §52.227-19 (“The terms and provisions of this contract shall comply with Federal laws and the Federal Acquisition Regulation”), <https://acquisition.gov/far/index.html>.

*Services.*²²⁰ The General Services Administration leads federal efforts in developing federal-compatible TOS agreements negotiated between the federal government and vendors who offer free social media, mobile, business, and other digital tools. The GSA effort goes well beyond the mobile app distribution issues that have been the focus of this discussion.

GSA maintains a website to help other agencies with TOS issues. One website explains the issues and offers a set of steps for an agency to follow before setting up an account to use a free digital media tool.²²¹ Another website lists all of the commercial online tools that already have federal-compatible terms of service agreements.²²² The website advises that not all agencies have necessarily agreed to the TOS for each of the tools listed. A third website lists the point of contact for each agency for federal-compatible terms of service agreements.²²³

The GSA guidance included in the 2013 OMB memo sets out six steps for agencies to follow when confronting TOS issues:

1. Review the OLC [Office of Legal Council, Department of Justice] Memorandum on *Anti-Deficiency Act Implications of Consent by Government Employees to Online Terms of Service Agreements Containing Open-Ended Indemnification Clauses*.
2. Require employees to consult with agency counsel before agreeing to any TOS.
3. Conduct an inventory of social media applications currently in use and maintain a record of signed TOS agreements.
4. Check GSA's list of approved social media applications.
5. Coordinate with GSA when negotiating with social media providers.
6. Review the TOS applicable to your agency's use of software and other information technology or Internet products and services.

The online GSA guidance is compatible. It recommends these five steps:

1. Review your agency's social media policy and guidance.
2. See what's available on the list of free products and services with federal TOS agreements.
3. Work with your agency point of contact for TOS matters.
4. If approved, create an account to use the digital media tool.
5. Put that account in GSA's Social Media Registry to help agencies inventory all their social media accounts and to give the public a way to validate official social media accounts.²²⁴

²²⁰ Office of Management and Budget, *Memorandum for the Heads of Executive Departments and Agencies, and Independent Regulatory Agencies, Antideficiency Act Implications of Certain Online Terms of Service Agreements* at 2 (2013) (M-13-10), <http://www.whitehouse.gov/sites/default/files/omb/memoranda/2013/m-13-10.pdf>.

²²¹ <http://www.digitalgov.gov/resources/federal-compatible-terms-of-service-agreements/>.

²²² <http://www.digitalgov.gov/resources/negotiated-terms-of-service-agreements/>.

²²³ <http://www.digitalgov.gov/resources/agency-points-of-contact-for-federal-compatible-terms-of-service-agreements/>.

²²⁴ General Services Administration, DigitalGov, *Federal-Compatible Terms of Service Agreements*, <http://www.digitalgov.gov/resources/federal-compatible-terms-of-service-agreements/>.

General advice for agency programs that want to use apps or other online tools is not to click through website agreements but to bring them to the agency general counsel. **The approval process for terms of service can take up to six months or more the first time that a federal agency negotiates with an app distribution. Several participants emphasized that solving TOS problems takes a tremendous amount of time.** One participant described the process as a clumsy three-legged race involving the agency lawyer, the platform, and GSA.

III. Strategies for Progress

Once a platform agrees to new TOS with one agency, the next agency may be able to use that same solution or find another one more quickly. Much of the substantive work only needs to be done once for the whole government, and it is in the interest of vendors and agencies to find solutions that have broad application. Some vendors now publish standard TOS just for federal agencies, and this allows other agencies to accept those federal TOS without additional negotiations or effort. GSA maintains a list of federal-compatible terms of service agreements online.²²⁵

Because TOS for federal agencies is a rapidly developing area of law, GSA and agency lawyers are working together to sort it out. The resources already available solve some problems, and more solutions are likely. The Federal Acquisition Regulation has already been adjusted once, and further changes are to be expected.

The rapidity of change with the Internet and with technology presents challenges of many dimensions that are likely to require additional attention in the future. One resource for helping agencies to find and address these challenges is the Social Media Community of Practice, which brings together more than 500 federal social media managers.²²⁶ There may be a need for further cooperation specifically among agency lawyers, perhaps under the auspices of the General Services Administration.

It is too early to say whether changes in statute are appropriate or necessary to address TOS issues.

²²⁵ General Services Administration, DigitalGov, *Negotiated Terms of Service Agreements*, <http://www.digitalgov.gov/resources/negotiated-terms-of-service-agreements/>.

²²⁶ General Services Administration, DigitalGov *Social Media Community of Practice*, <http://www.digitalgov.gov/communities/social-media/>.

Protection of Human Subjects

The Common Rule issued by numerous federal agencies regulates the conduct of research activities involving human subjects with the goal of protecting human subjects of research. In some cases, crowdsourcing activities will qualify as human subjects research. These activities will need approval from agency Institutional Review Boards.

I. Introduction

Research activities conducted or supported by federal agencies involving human subjects must comply with federal ethics regulations. The principal regulation is known as the *Common Rule* because numerous federal agencies adopted the same rule.²²⁷ The rule is lengthy and complex, and not all of its nuances and exceptions can be described here. The Common Rule is relevant to only some crowdsourcing activities because many crowdsourcing activities do not involve research. However, some crowdsourcing activities will clearly fall under the Common Rule, and others may fall close enough to the border to require attention to the Rule.

Research is a systematic investigation—that may include research development, testing, and evaluation—designed to develop or contribute to generalizable knowledge.²²⁸ An activity that meets the definition is still research even if it is not conducted under a formally designated research program. A human subject is a living individual about whom an investigator conducting research obtains data through intervention or interaction with the individual, or obtains identifiable, private information.²²⁹ These definitions (with some exceptions not relevant here) determine whether an activity is research involving human subjects.

Many crowdsourcing activities do not fall under the Common Rule because they are not research. Using volunteers to transcribe old records is not research. Individuals using a mobile app to share information on open gasoline stations following a disaster are not engaged in a research activity. Asking individuals to report on the water quality in their homes is not research if its purpose is to determine if the water complies with federal quality standards as part of an enforcement program.

The Common Rule clearly applies to activities, crowdsourced or otherwise, that are actually research. Many biomedical activities involving human subjects are research without question. Whether or when biomedical activities qualify as *crowdsourced* is not immediately important to this description of the Common Rule, but that determination appears to be a line-drawing problem undergoing debate. However, any activity that collects personal information about volunteers and then draws general conclusions about the volunteers in some way is research subject to the Common Rule.

²²⁷ 45 C.F.R. Part 46, <http://www.hhs.gov/ohrp/humansubjects/guidance/45cfr46.html>.

²²⁸ *Id.* at § 46.102(d).

²²⁹ *Id.* at § 46.102(f).

Borderline issues can easily arise. The intent of the crowdsourcing sponsor may determine if an activity is research, and the intent may not be clear. The role of volunteers may be inherently ambiguous. Volunteers might be considered part of the research team (data collectors, amateur scientists, etc.) or they might be considered research subjects. Consider, for example, a crowdsourcing activity (e.g., counting birds on a beach) that also collects personal information from volunteers. The sponsor may decide later to use the information about the volunteers to determine which type of observers (e.g., young/old, tall/short) do a better job. Those determinations are more likely to be human subjects research (developing generalizable knowledge) than the evaluation of the information about birds. Birds, of course, are not human subjects. The ambiguities present in the interface between crowdsourcing and the Common Rule cannot be resolved here. Any crowdsourcing sponsor concerned that the Common Rule might apply should consult with the chair of the agency's Institutional Review Board at the earliest opportunity.

II. Requirements

The Common Rule has three basic requirements for most federally funded research on human subjects: 1) Subjects must give legally effective informed consent, 2) an Institutional Review Board (IRB) must review the research, and 3) institutions must provide assurances of compliance with the Rule. The third of these requirements is institutional and does not require attention from those engaging in crowdsourcing at federal agencies and thus will not be described in detail here.

A. Informed Consent

The Common Rule specifies that a subject must receive these basic elements of informed consent:

- (1) a statement that the study involves research, an explanation of the purposes of the research and the expected duration of the subject's participation, a description of the procedures to be followed, and identification of any procedures which are experimental;
- (2) a description of any reasonably foreseeable risks or discomforts to the subject;
- (3) a description of any benefits to the subject or to others which may reasonably be expected from the research;
- (4) a disclosure of appropriate alternative procedures or courses of treatment, if any, that might be advantageous to the subject;
- (5) a statement describing the extent, if any, to which confidentiality of records identifying the subject will be maintained;
- (6) for research involving more than minimal risk, an explanation as to whether any compensation and an explanation as to whether any medical treatments are available if injury occurs and, if so, what they consist of, or where further information may be obtained;
- (7) an explanation of whom to contact for answers to pertinent questions about the research and research subjects' rights, and whom to contact in the event of a research-related injury to the subject; and
- (8) a statement that participation is voluntary, refusal to participate will involve no penalty or loss of benefits to which the subject is otherwise entitled, and the subject may

discontinue participation at any time without penalty or loss of benefits to which the subject is otherwise entitled.²³⁰

B. Institutional Review Boards

Federally funded research projects involving human subjects require approval by an Institutional Review Board. The Common Rule sets out requirements for the membership and operations of an IRB, matters of little importance to federal agency crowdsourcers. All federal agencies are likely to operate their own IRBs.

An IRB must determine that a proposed research project meets these requirements as set out in the Common Rule:

- (1) informed consent is sought from each subject;
- (2) risks to subjects are minimized;
- (3) risks to subjects are reasonable in relation to anticipated benefits, if any, to subjects, and the importance of the knowledge that may reasonably be expected to result;
- (4) the selection of subjects is equitable;
- (5) when appropriate, that the research plan makes adequate provision for monitoring the data collected to ensure the safety of subjects;
- (6) when appropriate, that there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of data; and
- (7) if some or all of the subjects are likely to be vulnerable to coercion or undue influence, such as children, prisoners, pregnant women, mentally disabled persons, or economically or educationally disadvantaged persons, that the study has additional safeguards to protect the rights and welfare of these subjects.²³¹

Satisfying an IRB that a research project meets these standards takes time, effort, and paperwork. However, not every project needs to go through the full formal approval process. An expedited process allows for approval of projects that involve no more than minimal risk.²³² A minimal risk arises when the probability and magnitude of harm or discomfort anticipated in the research are not greater in and of themselves than those ordinarily encountered in daily life or during the performance of routine physical or psychological examinations or tests.²³³ Some crowdsourced research activities will meet the minimal risk test, but not all will. For example, a project that conducts research to study volunteer motivation²³⁴ is likely considered minimal risk, while a project that collects genomic data is likely considered more than minimal risk.²³⁵ Under

²³⁰ *Id.* at § 46.116(a). The Rule requires some additional disclosures that include information about unforeseeable risks and additional costs. *Id.* at § 46.116(b).

²³¹ 45 C.F.R. § 46.111, <http://www.hhs.gov/ohrp/humansubjects/guidance/45cfr46.html>.

²³² *Id.* at § 46.110.

²³³ *Id.* at § 46.102(i).

²³⁴ See, e.g., Steve Kelling, Jeff Gebracht, Daniel Fink, Weng-Keen Wong, Jun Yu, Carl Lagoze, Theodoros Damoulas, & Carla Gomes, *eBird: A Human/Computer Learning Network for Biodiversity Conservation and Research* (2012), <http://www.aaai.org/ocs/index.php/IAAI/IAAI-12/paper/viewFile/4880%26t%3B/5433>.

²³⁵ Personal Genome Project, *Risks and Benefits*, <http://www.personalgenomes.org/organization/risks-benefits>.

expedited review, the IRB chair or one or more experienced IRB members reviews the research protocol, rather than the full IRB.

V. Strategies for Progress

A federal employee contemplating a crowdsourcing activity will want to determine as early as possible if the activity presents a human subject protection issue. As explained above, application of the Common Rule to crowdsourcing activities presents some inherent ambiguities. Resolving those ambiguities may not be simple, and different IRBs may well reach different conclusions based on the same facts. **To determine if the Common Rule applies to a federal agency crowdsourcing activity, an informal discussion with the chair of the relevant IRB may be the best starting point. The chair should be able to advise whether the Rule applies and whether the activity is likely to meet the minimal risk standard to qualify for expedited review.** Knowing whether an activity needs IRB approval and the route it must take through the IRB will determine the procedural and paperwork needs. As with other institutions, agency personnel using crowdsourcing methods are likely to find an IRB easier to work with if they show respect for the expertise of the IRB and the rules under which the IRB operates.

Even if the Common Rule does not apply, there may be some value in considering the informed consent disclosures from the Rule. Any collection of personal information should provide a suitable disclosure to the data source. The Privacy Act of 1974, as discussed previously, requires a disclosure to an individual asked to supply information.²³⁶ It may be appropriate to include some of the elements from the informed consent disclosures in that disclosure.

For the federal crowdsourcing community at large, the relationship between crowdsourcing and the Common Rule may need a clearer delineation. A clearer policy would also benefit IRBs that may not know how to characterize crowdsourcing activities. The federal crowdsourcing community might ask the Office for Human Research Protections (OHRP), the office primarily responsible for the Common Rule, for assistance.²³⁷

Before approaching OHRP, however, the federal crowdsourcing community would do well to examine the subject so that it can suggest distinctions between activities or classes of crowdsourcing that would be useful in developing specific guidance. Activities that collect little personal information and pose no risk to volunteers might be defined and distinguished from other activities that require more of volunteers. It will be harder to make the case for avoiding the Common Rule for some activities, like those in the biomedical arena.

OHRP is in the middle of a rulemaking process that may result in major changes to the Common Rule. The rulemaking is still at a preliminary stage, and it should be possible at a later stage to place new ideas on the table.²³⁸ Crowdsourcers and IRBs alike would benefit from clearer guidance. The National Institutes of Health, which has considerable experience with research

²³⁶ 5 U.S.C. § 552a(e)(3), <http://www.law.cornell.edu/uscode/text/5/552a>.

²³⁷ <http://www.hhs.gov/ohrp/index.html>.

²³⁸ The Department of Health and Human Services, which oversees OHRP, announced an Advance Notice of Proposed Rulemaking for the Common Rule in July 2011, <http://www.gpo.gov/fdsys/pkg/FR-2011-07-26/html/2011-18792.htm>.

subject to the Common Rule and which is looking more closely at crowdsourcing issues, might play a useful role in helping to frame a request for this guidance to OHRP.

Last Word

Any organization, whether a business, university, scientific organization, state government, or federal agency, operates under both internal and external constraints and rules. Crowdsourcing and citizen science—both rapidly developing methods for accomplishing functions that would be impossible or difficult otherwise—push against existing constraints by using nontraditional sources and methods. Crowdsourcing and citizen science often rely on Internet-based activities and new technologies. Large enterprises like the federal government that are bound by layers of controls and traditions do not change easily, and they are often incapable of rapid response to innovation. Crowdsourcing and citizen science are challenging by their nature because they are nontraditional for federal agencies and not anticipated by existing laws and processes.

Many of the laws that affect crowdsourcing and citizen science by federal agencies also affect numerous other agency functions. Any agency that seeks to collect information from more than nine people must comply with the Paperwork Reduction Act and submit an information collection request to OMB. Any agency that seeks to disseminate information to the public must look to satisfy the standards of the Information Quality Act for quality, objectivity, utility, and integrity. The Antideficiency Act is an antiquated law that limits some types of federal spending and the use of volunteers by federal agencies. The Privacy Act of 1974 applies to any agency activity that collects and retrieves personal information. Neither agencies nor agency functions have been fully exempted from the Privacy Act of 1974's basic requirements. The Common Rule protecting human subjects in research applies broadly to federal agencies (and to many other institutions) and has been in place for more than thirty years.

None of these laws stops crowdsourcing or citizen science, but all demand some attention. It may take considerable time and effort to satisfy all applicable requirements. Few actions by the federal government happen quickly and easily, especially when they are new. Crowdsourcing and citizen science are not likely to receive immediate exemptions from the bureaucratic and legal imperatives that apply generally to agencies.

In the short term, existing constraints must be accepted as givens. Those in agencies who want to use crowdsourcing or citizen science techniques must understand the existing rules and comply with them. Sometimes an agency can, with careful planning, lawfully avoid application of a law or use an available shortcut. Cooperation among those engaged in crowdsourcing and citizen science, something already happening with both success and enthusiasm, helps to make common tasks easier to accomplish. Everyone should be careful not to misunderstand existing policies or to assume that they are more restrictive than they actually are.

It is obviously possible today for federal agencies to engage in crowdsourcing and citizen science despite existing constraints. Over time, constraints may change because of changes in law, new technologies, and many other factors. While laws change much more slowly than technology, laws do change. **Those who find crowdsourcing a useful technique need to identify the existing constraints, convince others that the constraints are unreasonable or unnecessary, and present practical solutions that policymakers may accept.** This takes time and effort, and some types of solutions stand a better chance of acceptance than others. For example, old laws

like the Antideficiency Act are not likely to change, but a different approach may yield a solution. For instance, Congress sometimes passes laws giving a federal agency the ability to accept the services of volunteers. In the meantime, other methods can satisfy the existing restrictions. This demonstrates that there may be more than one way to solve these problems.

Crowdsourcing and citizen science are relatively new activities, and it will take time for the laws and rules that broadly regulate federal agency activities to adapt. As with so many other endeavors, creativity, cooperation, persistence, and patience are likely to achieve better and more efficient outcomes and processes that meet ongoing need. This report includes ideas and suggestions intended to help federal agencies engaged in crowdsourcing and citizen science to find ways through bureaucratic and legal barriers and to explore how rules and laws might change to meet their evolving needs.

Appendix A: Checklist of Legal Issues for Crowdsourcing and Citizen Science by Federal Agencies

This checklist identifies significant legal issues that can arise when federal agencies undertake crowdsourcing or citizen science activities. The discussion summarizes laws and identifies how the laws may apply in practice. As a summary, it may not address every nuance of the law, and it should not be a substitute for legal advice.

I. Paperwork Reduction Act

If an agency wants to collect information from more than nine people (whether by crowdsourcing, citizen science, or otherwise), the agency generally must comply with the rules issued under the Paperwork Reduction Act.²³⁹ Basically, the PRA requires the approval of the Office of Management and Budget (OMB) for most information collection efforts. Mandatory and voluntary collections fall under the PRA. It does not matter if activity relies on those who volunteer to provide their efforts without any legal obligation to do so.

Part 1: The PRA Steps

Anyone seeking to clear an information request through an agency and through OMB would do well to follow the combination of practical and mandated requirements described here in Part I. Formal requirements from the rule are in **bold type**.

Each step in the clearance process requires an agency to meet a set of specific standards or elements. Part II of this checklist describes the standards or elements, designated as Lists A through H.

This is the basic PRA flowchart:



²³⁹ Office of Management and Budget, *Controlling Paperwork Burdens on the Public*, 5 C.F.R. Part 1320, <http://www.ecfr.gov/cgi-bin/text-idx?SID=414b0e7c3e569ef65dd7b7695cf621b1&node=pt5.3.1320>.

Step 1: Agency develops information collection request

In general, the agency must **justify the collection** by meeting the substantive burden standards in List A. OMB will not, without a greater showing of need, approve the “unfavored” collection practices in List B. To obtain permission from OMB for information collection, agency employees seeking to collect information should prepare to

- Develop the information collection proposal.
- Obtain management support and approval.
- Find and navigate the internal agency PRA process (likely run by the CIO’s office). T

The process may vary somewhat from agency to agency.

For the **standards that an information collection request must satisfy**, see List C.

The information request **must provide reasonable notice to potential respondents** of six types of information. See List D.

Step 2: 60-day Federal Register notice; agency considers public comments

The agency must **publish in the Federal Register** a 60-day notice of the proposed information collection. The published notice must **solicit comments** about the questions in List E.

Step 3: Evaluate public comments

The agency must **evaluate the public comments** received from the Federal Register notice and amend its proposal in response to the comments as appropriate.

Step 4: 30-day Federal Register notice

The agency must **publish in the Federal Register** a second request for comment, allowing 30 days. For the **required content** of the second Federal Register notice, see List F.

Step 5: OMB review

The agency must **submit the information collection proposal to OMB** after or concurrent with the second Federal Register publication. The submission must include the seven elements in List G. One of those elements is a certification by the CIO. For the required elements of the certification, see List H.

Part 2: PRA Standards

List A. Burden to justify an information request

OMB will not approve an information collection request unless an agency demonstrates that it has taken every reasonable step to ensure that the proposed collection

- (1) is the least burdensome necessary for the proper performance of the agency's functions to comply with legal requirements and achieve program objectives;
- (2) is not duplicative of information otherwise accessible to the agency; and
- (3) has practical utility.

List B. Unfavored information collection practices

OMB will not normally approve the following practices:

- (1) Requiring reporting more often than quarterly;
- (2) requiring a response to a collection of information in fewer than 30 days;
- (3) requiring submission of more than an original and two copies of any document;
- (4) requiring retention of records, other than health, medical, government contract, grant-in-aid, or tax records, for more than three years;
- (5) collecting information for a statistical survey not designed to produce valid and reliable results generalizable to the universe of study;
- (6) requiring use of a statistical data classification that has not been reviewed and approved by OMB;
- (7) framing a request that includes a pledge of confidentiality not supported by statutory or regulatory authority, that is not supported by disclosure and data security policies consistent with the pledge, or that unnecessarily impedes sharing of data with other agencies for compatible confidential use; or
- (8) requiring submission of proprietary, trade secret, or other confidential information unless the agency can demonstrate that it has procedures to protect the information's confidentiality.

List C: Standards that an information collection request must address

- (1) Need. Evaluate the need for the collection or, in the case of an existing collection, the continued need for the collection.
- (2) Description. Describe functionally the information to be collected.
- (3) Plan. Set out a plan for the collection of information.
- (4) Burden Estimate. Develop a specific, objectively supported estimate of burden, or, for an existing collection, evaluate the burden imposed by the collection.
- (5) Reduce the Burden. Evaluate whether (and if so, to what extent) the burden on respondents can be reduced by use of automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g., permitting electronic submission of responses.
- (6) Pilot. Test the collection of information through a pilot program, if appropriate.
- (7) Use. Prepare a plan for the efficient and effective management and use of the information to be collected, including necessary resources.

List D: An information request must provide reasonable notice to potential respondents of six types of information

- (1) The reasons for collecting the information;
- (2) the way the information furthers the proper performance of the functions of the agency;
- (3) an estimate, to the extent practicable, of the average burden of the collection;
- (4) whether responses to the collection of information are voluntary, required to obtain or retain a benefit, or mandatory;
- (5) the nature and extent of confidentiality to be provided, if any; and
- (6) the fact that an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

List E: The first Federal Register notice must solicit these comments

- (1) Is the information necessary, and will it have practical utility?
- (2) Is the burden estimate accurate?
- (3) What will enhance the quality, utility, and clarity of the information?
- (4) How can the collection minimize the burden on respondents, including through use of information technology?

List F: Content of the second Federal Register notice

- (1) A title for the collection of information;
- (2) a summary of the collection of information;
- (3) a brief description of the need for the information and proposed use of the information;
- (4) a description of the likely respondents, including the estimated number of likely respondents, and proposed frequency of response to the collection of information;
- (5) an estimate of the total annual reporting and recordkeeping burden that will result from the collection of information;
- (6) notice that comments may be submitted to OMB; and
- (7) the time period within which the agency is requesting OMB to approve or disapprove the collection of information if the agency seeks OMB to conduct its review on an emergency basis.

List G: Contents of the submission to OMB

- (1) A certification from the agency head or CIO (content of the certification set out below);
- (2) the proposed collection of information in accordance with the rule for an information collection under a proposed rule, a current rule, or not in a rule (as applicable);
- (3) an explanation for the agency's decision that it would not be appropriate for the proposed collection to display an expiration date;

- (4) an explanation for a decision to provide for any payment or gift to respondents, other than remuneration of contractors or grantees;
- (5) a statement about the use of automated, electronic, mechanical, or other technological collection techniques or other forms of information technology for information collection, and an explanation for the decision;
- (6) a citation to the first Federal Register notice and a summary of the public comments from that notice and any actions taken by the agency in response to the comments; and
- (7) copies of pertinent statutory authority, regulations, and any related supporting materials requested by OMB.

List H: Standards for certification by an agency CIO

The CIO must certify that the proposed information collection

- (1) is necessary for the proper performance of the functions of the agency, including that the information will have practical utility;
- (2) is not unnecessarily duplicative of information otherwise reasonably accessible to the agency;
- (3) reduces to the extent practicable and appropriate the burden on persons who shall provide information to or for the agency, including with respect to small entities, the use of such techniques as:
 - (a) Establishing differing compliance or reporting requirements or timetables that take into account the resources available to those who are to respond;
 - (b) The clarification, consolidation, or simplification of compliance and reporting requirements; or
 - (c) An exemption from coverage of the collection of information, or any part thereof;
- (4) is written using plain, coherent, and unambiguous terminology and is understandable to those who are to respond;
- (5) is to be implemented in ways consistent and compatible, to the maximum extent practicable, with the existing reporting and recordkeeping practices of respondents;
- (6) indicates for each recordkeeping requirement the length of time persons must maintain the records specified;
- (7) informs potential respondents of the estimated average burden, together with a request for comments on the accuracy of the estimate and for suggestions on reducing the burden;
- (8) has been developed by an office that has planned and allocated resources for the efficient and effective management and use of the information to be collected, including the processing of the information in a manner that will enhance the utility of the information to agencies and the public;
- (9) uses effective and efficient statistical survey methodology appropriate to the purpose for which the information is to be collected; and
- (10) to the maximum extent practicable, uses appropriate information technology to reduce burden and improve data quality, agency efficiency, and responsiveness to the public.

II. Information Quality Act

The purpose of the Information Quality Act²⁴⁰ (IQA) is to ensure and maximize the quality, objectivity, utility, and integrity of information, including statistical information, disseminated to the public.

Step 1: Find agency IQA guidelines

Most agencies have information quality guidelines.²⁴¹ Find the guidelines and see what may be required for a crowdsourcing or citizen science activity.

Step 2: Is crowdsourcing or citizen science likely to be *influential*?

Will the crowdsourcing or citizen science activity involve any influential scientific, financial, or statistical information that may have a clear and substantial impact on important public policies or important private sector decisions? Each agency defines what it considers to be *influential*.

Step 3: Review agency dissemination requirements

If the information collected will be disseminated, review agency requirements for quality, including objectivity, utility, and integrity.

Step 4: Contract or grant application?

The IQA applies to a contract or grant if an agency directs the recipient to disseminate the results or reviews and approves the results before dissemination. The contract or grant document may require a reference to the agency's IQA guidelines.

Step 5: Is there a rulemaking implication?

If the crowdsourcing or citizen science activity is likely to affect a rulemaking or raise subjects that are controversial or have political implications, it may be appropriate to pay extra attention to the standards for the information involved.

III. Antideficiency Act

The Antideficiency Act²⁴² generally limits agencies from accepting voluntary services, but the limits are far from absolute. These steps help define approaches for agencies.

²⁴⁰ Consolidated Appropriations – Fiscal Year 2001, Pub. L. No. 106-554, § 515, 114 Stat. 2763A153 to 2763A-154 (2000) (44 U.S.C. § 3516 note), http://www.law.cornell.edu/uscode/text/44/3516?qt-us_code_temp_noupdates=1#qt-us_code_temp_noupdates.

²⁴¹ OMB maintains a link to all agency guidelines: http://www.whitehouse.gov/omb/inforeg_agency_info_quality_links/.

²⁴² 31 U.S.C. §§ 134,1342, <http://www.law.cornell.edu/uscode/text/31/1341>. The best reference to the law here is Government Accountability Office, 2 *Principles of Federal Appropriations Law* chapter 6 (2006) (GAO-06-382SP), <http://gao.gov/legal/redbook/redbook.html>.

Step 1: Can your agency accept services?

See if your agency's has a law allowing it to accept services. A statute that allows agencies to accept voluntary services (e.g., unpaid student interns) is sufficient for crowdsourcing or citizen science.²⁴³

Step 2: Can your agency accept gifts or use volunteers?

See if your agency has a statute allowing acceptance of unconditional gifts or donations of services or the use of volunteers.²⁴⁴

Step 3: Do crowdsourcing or citizen science volunteers sign waivers?

The Act's restrictions on acceptance of services are not violated if a volunteer signs a written agreement that the services are to be rendered gratuitously with no expectation of future payment.

IV. Privacy

If a crowdsourcing or citizen science activity involves the collection or maintenance of personal information, then various federal privacy laws may impose requirements on the processing of that information. The following steps can help agencies analyze their requirements.

Step 1: Does the crowdsourcing or citizen science activity raise privacy issues?

Will it collect or maintain *any* information with individual identifiers (e.g., name, identifying number, photo) or that may otherwise be linkable to an identified individual? If so, the Privacy Act of 1974 probably applies.²⁴⁵

Step 2: Is a privacy impact assessment (PIA) required?

Probably so if the crowdsourcing or citizen science activity requires an information clearance request under the PRA *and* collects any personally identifiable information.²⁴⁶

Step 3: Does the crowdsourcing or citizen science activity create a "major" information system?

²⁴³ See, e.g., 42 U.S.C. § 5197(c)(3) (Administrator of the Federal Emergency Management Agency may use voluntary and uncompensated services by individuals or organizations), <http://www.law.cornell.edu/uscode/text/42/5197>.

²⁴⁴ See, e.g., 51 U.S.C. § 20113(d) (authorizing NASA to accept unconditional gifts or donations of services, money, or property, real, personal, or mixed, tangible or intangible), <http://www.law.cornell.edu/uscode/text/51/20113>.

²⁴⁵ 5 U.S.C. § 552a, <http://www.law.cornell.edu/uscode/text/5/552a>.

²⁴⁶ Public Law No. 107-347, 116 Stat. 2910 (2002), 44 U.S.C. § 3501 note, <http://www.law.cornell.edu/uscode/text/44/3501>.

If yes, then the activity will need a more extensive PIA. If not, then the PIA can probably be completed while meeting the Paperwork Reduction Act clearance process and the Privacy Act of 1974 requirements.

Step 4: Consider any CIO requirements

The agency CIO plays a role in approving PIAs, so it may be worthwhile to see if the agency CIO has any procedural or substantive requirements for a PIA.

Step 5: Can you avoid the Privacy Act?

If the activity will collect personal information on volunteers, on agency employees, or on other individuals, then there is a good chance that the Privacy Act of 1974 will apply.²⁴⁷ The Privacy Act of 1974 may be avoidable if the activity meets the following criteria:

- a. Your activity does not collect or maintain any personal information.
- b. Your activity does not retrieve any record by personal identifier.
- c. You assign a unique identifier that cannot be linked to an individual.
- d. You encrypt identifying information so that neither the encryption can be defeated nor the individual otherwise identified so that no system of records exists.

Step 6: Do you need a system of records notice?

If the activity results in the collection and maintenance of personal information in a *system of records*, from which the information is actually retrieved by an individual identifier (name, number, etc.), then the activity needs to develop and publish in the Federal Register a System of Records Notice. Those asked to provide personal information must receive a notice describing the purpose and authority for the collection as well as how the information will be used and disclosed. The agency privacy officer can assist with these tasks.

Step 7: Do you collect personal information from children?

If the activity collects personal information from children under the age of 13 (e.g., through a school or scout activity), then an OMB policy requires compliance with the Children's Online Privacy Protection Act.²⁴⁸ If the activity involves schools and collects personal information about

²⁴⁷ 5 U.S.C. § 552a, <http://www.law.cornell.edu/uscode/text/5/552a>.

²⁴⁸ Office of Management and Budget, *Memorandum for Heads of Executive Departments and Agencies, Privacy Policies and Data Collection on Federal Web Sites* (2000) (M-00-13), http://www.whitehouse.gov/omb/memoranda_m00-13/.

students of any age, discuss with the school how the Family Educational Rights and Privacy Act applies.²⁴⁹

Step 8: Do you collect health information?

The privacy and security rules of the Health Insurance Portability and Accountability Act might be relevant to the collection of health information if the agency is a health care provider or insurer.²⁵⁰

Step 9: Breach notification

Each agency should have a policy describing its response to a security breach of personal information. The need for responding to a security breach could arise for any personal information maintained for crowdsourcing or citizen science.

Step 10: Is any personal data crossing an international border?

Foreign data protection laws may become relevant if a crowdsourcing or citizen science activity involves the collection and transfer to the United States of personal information about individuals living in other countries.

V. Terms of Service for Mobile Apps

For those in an agency who want to develop a mobile app for crowdsourcing or citizen science, the following steps should be considered:

Step 1: Start addressing the legal issues right away

It may take months before a solution to the legal issues is in place. Let the legal work begin while you work on other administrative requirements.

Step 2: Consult agency social media policy

See if your agency has any social media policy or guidance or otherwise provides any directions or assistance.

Step 3: Make sure that there is a legal issue

Will the app development or distribution use an online tool or website that has terms of service, contractual clauses, or that asks for agreement (perhaps just a click) as a condition of use? If so or if it is not clear, ask your agency lawyer. It is a good idea to check with legal counsel if there is any doubt.

²⁴⁹ 20 U.S.C. §1232g, <http://www.law.cornell.edu/uscode/text/20/1232g>. See also 34 C.F.R. Part 99, <http://www.law.cornell.edu/cfr/text/34/part-99>.

²⁵⁰ 45 C.F.R. Parts 160 & 164, <http://www.ecfr.gov/cgi-bin/text-idx?SID=105b35a2b5dcc9e0e94337af5714a659&tpl=/ecfrbrowse/Title45/45CsubchapC.tpl>.

Step 4: Look for help from GSA

Check the GSA website at <http://www.digitalgov.gov/resources/negotiated-terms-of-service-agreements/> to see if there is a negotiated terms of service agreement for federal agencies. However, do not assume that an existing agreement covers your agency without further investigation.

Step 5: Find your agency point of contact for TOS matters

Consult the list at <http://www.digitalgov.gov/resources/agency-points-of-contact-for-federal-compatible-terms-of-service-agreements/>.

Step 6: Use available resources

Work with your agency lawyer, point of contact for TOS matters, and GSA to resolve TOS issues.

VI. Human Subjects Protection

Research activities conducted or supported by federal agencies involving human subjects must comply with federal ethics regulations. The principal regulation is known as the Common Rule because numerous federal agencies have adopted the same rule.²⁵¹

Step 1: Does the Common Rule apply?

The threshold issue is whether the Common Rule providing protection for human subjects in research activities applies to a crowdsourcing or citizen science activity.

Step 2: Are you collecting personal information about volunteers?

Even if the stated purpose of the crowdsourcing or citizen science activity is not “a systematic investigation, including research development, testing and evaluation, designed to develop or contribute to generalizable knowledge” (the definition of research), collecting personal information about volunteers may give rise to questions about the possible application of the Common Rule.

Step 3: Consult if there is doubt

If there is any doubt or ambiguity about the applicability of the Common Rule, the proponent of the crowdsourcing or citizen science project should consult with the chair of the Institutional Review Board for the federal agency (or agencies) conducting the project.

Step 4: Meet informed consent and IRB review requirements

²⁵¹ 45 C.F.R. Part 46, <http://www.hhs.gov/ohrp/humansubjects/guidance/45cfr46.html>.

If the Common Rule applies, a covered research project must provide basic elements of informed consent to the data subjects. A project covered by the Common Rule must also obtain approval from an IRB.

Step 5: Does the project qualify for expedited review?

Some crowdsourcing or citizen science research projects will qualify for expedited review by IRBs if the projects involve no more than minimal risk, and this should simplify the human subjects review process.

Appendix B: Sample System of Records Notice under the Privacy Act of 1974

DOI /USGS-2

System Name:

Earthquake Hazards Program Earthquake Information.

System Location(s):

USGS Geologic Hazards Team, 1711 Illinois St, Golden, CO 80401.

Denver Federal Center, Building 53, Lakewood, CO 80225.

USGS Earthquake Hazards Team, 345 Middlefield Rd., Menlo Park, CA 94025.

USGS Pasadena Field Office, 525 S. Wilson Ave., Pasadena, CA 91106.

EROS Data Center, 47914 252nd St., Sioux Falls, SD 57198.

Categories of Individuals Covered by the System:

(1) Individuals who have requested information from the Earthquake Hazards Program (EHP) or have reported a Web site problem to the EHP Web Team. (2) Individuals who have signed up to receive e-mail announcements from various projects within the EHP. (3) Individuals who have subscribed to the Earthquake Notification Service. (4) Individuals who have entered data in the citizen science system(s).

Categories of Records in the System:

The information retained in the system contains the following information from the individuals covered by the system: e-mail address, in some cases login id, login password, username, and non-mandatory data that may include the name, affiliation, phone number, and postal address.

Authority for Maintenance of the System:

This system of records is maintained under the authority of NEHRP (National Earthquake Hazards Reduction Program), established by Congress in 1977 (Pub. L. 95-124) and the Advanced National Seismic System (Pub. L. 106-503 and Pub. L. 108-360).

Routine Uses of Records Maintained in the System, Including Categories of Users and the Purposes of Such Uses:

The primary purposes of the records is: To make earthquake information available to members of the public who request to participate in exchanges of earthquake information by e-mail notification, Web site publications, and real-time data pushes/pulls to clients.

DISCLOSURES OUTSIDE DOI MAY BE MADE WITHOUT THE CONSENT OF THE INDIVIDUAL TO WHOM THE RECORD PERTAINS UNDER THE ROUTINE USES LISTED BELOW:

- (1) (a) To any of the following entities or individuals, when the circumstances set forth in paragraph (b) are met:
- (i) The U.S. Department of Justice (DOJ);
 - (ii) A court or an adjudicative or other administrative body;
 - (iii) A part in litigation before a court or an adjudicative or other administrative body; or
 - (iv) Any DOI employee acting in his or her individual capacity if DOI or DOJ has agreed to represent that employee or pay for private representation of the employee;
- (b) When:
- (i) One of the following is a party to the proceeding or has an interest in the proceeding:
 - (A) DOI or any component of DOI;
 - (B) Any other Federal agency appearing before the Office of Hearings and Appeals;
 - (C) Any DOI employee acting in his or her official capacity;
 - (D) Any DOI employee acting in his or her individual capacity if DOI or DOJ has agreed to represent that employee or pay for private representation of the employee;
 - (E) The United States, when DOJ determines that DOI is likely to be affected by the proceeding; and
 - (ii) DOI deems the disclosure to be:
 - (A) Relevant and necessary to the proceeding; and
 - (B) Compatible with the purpose for which the records were compiled.
- (2) To a congressional office in response to a written inquiry that an individual covered by the system, or the heir of such individual if the covered individual is deceased, has made to the office.
- (3) To any criminal, civil, or regulatory law enforcement authority (whether Federal, State, territorial, local, Tribal, or foreign) when a record, either alone or in conjunction with other information, indicates a violation or potential violation of law—criminal, civil, or regulatory in nature, and the disclosure is compatible with the purpose for which the records were compiled.
- (4) To an official of another Federal agency to provide information needed in the performance of official duties related to reconciling or reconstructing data files or to enable that agency to respond to an inquiry by the individual to whom the record pertains.
- (5) To Federal, State, territorial, local, Tribal, or foreign agencies that have requested information relevant or necessary to the hiring, firing, or retention of an employee or contractor, or the issuance of a security clearance, license, contract, grant, or other benefit, when the disclosure is compatible with the purpose for which the records were compiled.
- (6) To representatives of the National Archives and Records Administration to conduct records management inspections under the authority of 44 U.S.C. 2904 and 2906.

(7) To State and local governments and Tribal organizations to provide information needed in response to court order and/or discovery purposes related to litigation, when the disclosure is compatible with the purpose for which the records were compiled.

(8) To an expert, consultant, or contractor (including employees of the contractor) of DOI that performs services requiring access to these records on DOI's behalf to carry out the purposes of the system.

(9) To appropriate agencies, entities, and persons when:

(a) It is suspected or confirmed that the security or confidentiality of information in the system of records has been compromised; and

(b) The Department has determined that as a result of the suspected or confirmed compromise there is a risk of harm to economic or property interest, identity theft or fraud, or harm to the security or integrity of this system or other systems or programs (whether maintained by the Department or another agency or entity) that rely upon the compromised information; and

(c) The disclosure is made to such agencies, entities, and persons who are reasonably necessary to assist in connection with the Department's efforts to respond to the suspected or confirmed compromise and prevent, minimize, or remedy such harm.

(10) To the Office of Management and Budget during the coordination and clearance process in connection with legislative affairs as mandated by OMB Circular A-19.

(11) To the Department of the Treasury to recover debts owed to the United States.

(12) To the news media when the disclosure is compatible with the purpose for which the records were compiled.

(13) To a consumer reporting agency if the disclosure requirements of the Debt Collection Act, as outlined at 31 U.S.C. 3711(e)(1), have been met.

Policies and Practice for Storing, Retrieving, Accessing, Retaining, and Disposing of Records in the System:

Storage:

All records are maintained in a relational MySQL database stored on hard disk on each of the Web servers in Golden, CO; Denver, CO; Menlo Park, CA; Pasadena, CA; and Sioux Falls, SD, and backed up on magnetic tape. Electronic requests sent to the "Web Team" e-mail contact designated in the footer of every Web page on the Earthquake Hazards Program Web site, which contains the return e-mail address of the inquirer, are deleted as soon as a response to the inquiry is sent to the inquirer.

Retrievability:

All data in the database can be accessed by the database administrators by any mandatory field, which includes e-mail address or account name.

Safeguards:

(1) *Physical Security:* The systems are physically housed in Government offices consisting of locked rooms with floor to ceiling walls. Access is granted through a proximity card system. Backup tapes are stored at the Denver Federal Center in Building 25 in Room 1860, with access granted through a proximity card system, and in Menlo Park Building 11 and 3, with access granted through a proximity card system.

(2) *Technical Security:* Electronic records are maintained in conformity with Office of Management and Budget, National Institute of Standards Technology and Departmental requirements reflecting the implementation of the Federal Information Security Management Act. Electronic data is protected through user identification, passwords, database permissions, a Privacy Act Warning, and software controls. These security measures establish different degrees of access for different types of users. The security controls protecting these databases are implemented in a hierarchical manner. The top layer is the Department of the Interior's Enterprise Services Network (ESN) security infrastructure, which includes firewalls maintained in accordance with Department of Interior standards, Active-Scout Intrusion Detection, and a Juniper Intrusion Detection and Prevention (IDP) system. Additional security methods are implemented at each site: Firewalls, SSH, TCPwrappers, and Microsoft Active Directory. In addition to the layers of security described above, database access is controlled by restricted access to *http://usgs.gov* domains and by IP address, system user authentication, database access (table and row level) via grants, and specific database-table access by user account restrictions. Privacy information sent via the Internet is encrypted by SSL. The Security Plan addresses the Department's Privacy Act safeguard requirements for Privacy Act systems at 43 CFR 2.51. A Privacy Impact Assessment was completed to ensure that Privacy Act requirements and safeguards are sufficient and in place. Its provisions will be updated as needed to ensure that Privacy Act requirements continue to be met.

(3) *Administrative Security:* Access is strictly limited to authorized personnel whose official duties require such access. All Departmental and contractor employees with access to the records are required to complete Privacy Act, Federal Records Act, and Information Technology Security Awareness training prior to being given access to the system, and on an annual basis thereafter. All users sign security forms stating they will neither misuse government computers nor the information contained therein. In addition, managers and supervisors of users monitor the use of the database and ensure that the information is used in accordance with certified and accredited business practices.

Retention and Disposal:

The records in the system are retained and disposed of in accordance with National Archives and Records Administration procedures and General Records Schedule 308-01 and 310-01.

System Manager(s) and Address(es):

ANSS Manager, USGS-GD-GHT, DFC P.O. Box 25046 MS-966, Denver, CO 80225.

Notification Procedure:

An individual requesting notification of the existence of records on himself or herself should send a signed, written inquiry to the Systems Manager identified above. The request envelope and letter should both be clearly marked "PRIVACY ACT INQUIRY." A request for notification must meet the requirements of 43 CFR 2.60.

Record Access Procedures:

An individual requesting records on himself or herself should send a signed, written inquiry to the System Manager identified above. The request should describe the records sought as specifically as possible. The request envelopes and letter should both be clearly marked "PRIVACY ACT REQUEST FOR ACCESS." A request for access must meet the requirements of 43 CFR 2.63.

Contesting Record Procedures:

An individual requesting corrections or the removal of material from his or her records should send a signed, written request to the System Manager identified above. A request for corrections or removal must meet the requirements of 43 CFR 2.71.

Record Source Categories:

Information in this system is obtained from the individuals who access the Earthquake Hazards Program Web site and fill out one of the forms either to provide information or to request information.

Exemptions Claimed for the System:

None.

Source: Office of the Federal Register, Privacy Act Issuances (2013),
<http://www.gpo.gov/fdsys/pkg/PAI-2013-DOI/xml/PAI-2013-DOI.xml>.