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Enhancing Public Access to Online Rulemaking Information

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ENHANCING PUBLIC ACCESS TO ONLINE RULEMAKING INFORMATION

Cary Coglianese*

One of the most significant powers exercised by federal agencies is their power to make rules. Given the importance of agency rulemaking, the process by which agencies develop rules has long been subject to procedural requirements aiming to advance democratic values of openness and public participation. With the advent of the digital age, government agencies have engaged in increasing efforts to make rulemaking information available online as well as to elicit public participation via electronic means of communication. How successful are these efforts? How might they be improved? In this article, I investigate agencies' efforts to make rulemaking information available online. Drawing on a review of current agency uses of the Internet, a systematic survey of regulatory agencies' websites, and interviews with managers at a variety of federal regulatory agencies, I identify both existing "best practices" as well as opportunities for continued improvement. The findings of this research suggest that there exist both considerable differences in how well different agencies are making rulemaking information available online as well as significant opportunities for the diffusion of best-practice innovations that some agencies have adopted. This research also provides a basis for seven recommendations that I offer for enhancing both the accessibility and quality of rulemaking through online technology. A commitment to well-accepted democratic principles applicable to regulatory agencies should lead federal web

Edward B. Shils Professor of Law and Professor of Political Science, University of Pennsylvania Law School, and Director, Penn Program on Regulation. The author gratefully acknowledges the dedicated support provided by a team of website reviewers from the student body of the University of Pennsylvania Law School as well as excellent assistance provided by members of the University of Pennsylvania Law School library, faculty support, and information technology staffs. Several student research assistants also assisted in various aspects of this study. Jessica Goldenberg provided crucial and capable overall management of the website analysis discussed in Part III and played a key role in setting up the interviews discussed in Part IV; Eric Merron provided support with data entry and analysis on the website study; David Rosen assisted with research, drafting, and arranging interviews; Christopher Wahl provided extensive and excellent support with research, drafting, and editing; Kamya Mehta provided research and drafting on several discrete issues; and Stephanie Lo studied website accessibility to the disabled. Professor Stuart Shapiro of Rutgers University helpfully consulted and provided assistance with the website coding. This article is based on a report prepared for the Administrative Conference of the United States (ACUS), which led to the adoption of formal recommendations in December 2011. ACUS, Adoption of Recommendations, 77 Fed. Reg. 2257, 2264-65 (Jan. 17, 2012). The views expressed in this article are those of the author and do not necessarily reflect those of the members of the Conference or its committees.

designers to strive to create websites that are as accessible to ordinary citizens, including individuals with limited English proficiency, vision impairments, and low-bandwidth connections, as they are to the sophisticated repeat players in Washington policymaking circles.

INTRO	DUCTION	3
I.	THE DEVELOPMENT AND GOALS OF E-RULEMAKING	7
II.	CURRENT USES OF THE INTERNET AND AGENCY	
	RULEMAKING	11
	A. Agency Websites	12
	B. Social Media	15
	C. Government-Wide Websites and Resources	19
	D. Nongovernmental Websites on Federal Rulemaking	22
III.	SYSTEMATIC ANALYSIS OF AGENCY WEBSITES AND	
	RULEMAKING	24
	A. Past Research	24
	B. Rulemaking and Agency Websites	26
	C. Agency Websites and Social Media Today	28
	1. General Website Characteristics	29
	2. Social Media	30
	3. Rulemaking Information	31
	4. Overall Assessment	33
IV.	AGENCY PERSPECTIVES ON E-RULEMAKING	35
	Theme 1: The Value of the Internet	36
	Theme 2: The Complexity of Rulemaking Information	37
	Theme 3: Effectively Using Electronic Media to Support	
	Rulemaking Is a Management Challenge as Much as a	
	Technology Challenge	38
	Theme 4: Agencies Serve Multiple Audiences	39
	Theme 5: Agencies Face Increasing Pressures to Load Information	
	on Their Homepages	39
	Theme 6: Agencies Are Attentive to Accessibility for Special	
	Populations	40
	Theme 7: Managing the Accumulation of Information is an	
	Emerging Concern	41
	Theme 8: Agencies Are Still Learning How to Use Social Media.	41
	Theme 9: Ongoing Evaluation Is Crucial for Making Continuous	
	Improvement	42
	Theme 10: Effective Use of Electronic Media Requires Adequate	
	Resources	42

V.	RECOMMENDATIONS	43
	Recommendation 1. Administrative Agencies Should Manage Their	
	Use of the Internet with Rulemaking Participation by the Genera	l
	Public in Mind	44
	Recommendation 2. Agencies Should Provide a One-Stop Location	
	on Their Homepages for All Rulemakings Currently Open for	
	Comment	17
		47
	Recommendation 3. Agencies Should Consider, in Appropriate	
	Rulemakings, Retaining Facilitator Services to Manage Discussion	
	with Respect to These Rulemakings on Social Media Sites	52
	Recommendation 4. Agencies Should Strive Further to Improve the	
	Accessibility of Their Websites to All Members of the Public	53
	1. Non-English Access	54
	2. Low-Bandwidth Access	
	3. Access for Individuals with Disabilities	
	Recommendation 5. Agencies Should Display Comment Policies in	
	Accessible Locations or Provide Links to These Policies in Multip	le,
	Accessible Locations, Especially on Webpages That Elicit Comme	
		61
	Recommendation 6. Agencies Should Develop Systematic Protocols	01
	5	(2
	for the Retrieval of Old Material Online	62
	Recommendation 7. Agencies Should Conduct Ongoing Evaluations	
	of Their Use of the Internet Against the Goals of E-Rulemaking .	
CONC	LUSION	65

One of the most significant powers exercised by federal agencies in the United States is their power to make rules. These regulations bind millions of individuals and businesses, imposing substantial compliance costs on them in an attempt to advance important goals for society. The nation's economic prosperity, public health, and security are significantly affected by rules issued by administrative agencies.

Given the substantive importance of agency rulemaking, the process by which agencies develop regulations has long been subject to procedural requirements aiming to advance democratic values of openness and public participation. The Administrative Procedure Act of 1946 (APA), for example, mandates that agencies provide the public with notice of proposed rules and allow them an opportunity to comment on these proposals before they take final effect. Since 1966, the Freedom of Information Act (FOIA) has established the public's right to access certain information held by the

government.² Court decisions reviewing agency rules have tended to reinforce these statutes' principles of openness and public participation in the rulemaking process.³

With the advent of the digital age, government agencies have encountered both new opportunities and new challenges in putting these longstanding principles into practice. The development of the Internet has resulted in increasing efforts to make more rulemaking information available online as well as to elicit public participation via electronic communication. Across the full range of functions and services they provide, federal agencies have made great strides to connect with the public through electronic media such as websites. Indeed, as one government official recently noted, "When people interact with an agency today, they are most likely to go to its website. The website has become the front door for members of the public to interact with their government." And data seem to bear this out. Although measures of overall satisfaction with the federal government have recently declined, public satisfaction with agency websites remains quite strong.⁵ Indeed, according to an analysis by the American Customer Satisfaction Index, "federal websites are one of the most satisfying aspects of the federal government."6

Of course, when it comes to the use of electronic media, no entity can rest on its laurels. Agencies may be able, first of all, to do better still than they are doing at present. Moreover, the rapid pace of innovation in both new technologies and new applications of existing technologies requires the

^{2.} Freedom of Information Act of 1966, Pub. L. No. 88-554, 80 Stat. 383 (codified as amended at 5 U.S.C. § 552 (2006)).

^{3.} See, e.g., Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins., 463 U.S. 29, 48 (1983) (affirming that "an agency must cogently explain why it has exercised its discretion in a given manner"); Citizens to Preserve Overton Park, Inc. v. Volpe, 401 U.S. 402, 419 (1971) (holding that litigation affidavits are an "inadequate basis for review" under the APA, which requires that the "whole record" developed by the agency in the rulemaking process be considered); Sierra Club v. Costle, 657 F.2d 298, 400–01 (D.C. Cir. 1981) (finding that the legitimacy of creating policy through unelected administrative rulemakers is dependent upon "the openness, accessibility, and amenability of these officials to the needs and ideas of the public from whom their ultimate authority derives").

^{4.} Telephone interview with Rachel Flagg, Co-Chair, Federal Web Managers Council (July 1, 2011).

^{5.} Citizen Satisfaction with Federal Government Services Plummets, AM. CUSTOMER SATISFACTION INDEX (Jan. 25, 2011), http://www.theacsi.org/index.php?option=com_content&view=article&id=237:acsi-commentary-january-2011&catid=14&Itemid=297. In citing public satisfaction with government websites, I am not suggesting that satisfaction provides the appropriate metric for designing and assessing agency websites, but only that such satisfaction indicates how important government websites have become as a means of public interaction with the government. For further discussion of satisfaction, see *infra* Part V, Recommendation 7.

^{6.} Citizen Satisfaction with Federal Government Services Plummets, supra note 5.

federal government to continue seeking improvements in order to maintain public satisfaction. Despite the current level of satisfaction with federal websites, the Obama Administration has already targeted agency websites as a major part of its "Campaign to Cut Waste," specifically seeking "ways to improve the online experience with Federal websites." Some agencies undoubtedly trail behind others in their use of electronic media. And not all functions of agencies have achieved the same level of accessibility via the Internet. General satisfaction levels do not necessarily measure how well agencies are doing with respect to their use of electronic media in their rulemaking functions, for example.

In this article, I survey the landscape of agencies' contemporary efforts to use electronic media in the rulemaking process. Drawing on a review of current agency uses of the Internet, a systematic survey of regulatory agencies' websites, and interviews with managers at a variety of federal regulatory agencies, I identify both existing "best practices" as well as opportunities for continued improvement. I do so to provide input into a broader series of government-wide efforts to study and improve federal agencies' use of electronic media. This is, after all, an energetic time for governmental innovation in information technology, with no shortage of initiatives and ideas for improving the federal government's digital infrastructure. In recent years, many agencies have used the Internet to improve greatly the public's access to information about rulemaking and to provide enhanced opportunities for public input into agency decisions. Through both large, cross-cutting initiatives—such as the online portal Regulations.gov—as well as smaller ones at individual agencies, the federal government has undertaken numerous efforts to promote transparency of and public participation in the rulemaking process. In addition, a growing administrative infrastructure has emerged both within and across agencies, such as through the government-wide Federal Web Managers Council, for standardizing and improving the design of federal agency websites as well as agency use of interactive electronic media.

What makes this article distinctive is its principal focus on electronic media as it pertains to agency rulemaking. In addition to suggesting that agencies continue many of their efforts to improve their use of electronic media generally, I offer seven recommendations in this article for federal agencies to follow to improve the accessibility of rulemaking information through the use of digital technology. These recommendations emphasize using electronic media, such as agency websites and social media tools, to facilitate public participation in the rulemaking process.

^{7.} Erin Lindsay, Open for Questions: Live Chat on Improving Federal Websites, WHITE HOUSE (July 11, 2011), http://www.whitehouse.gov/blog/2011/07/11/open-questions-live-chat-improving-federal-websites.

In Part I of this article, I present a brief history of the early development of the federal government's use of electronic media in the rulemaking process so as to clarify both the goals of so-called e-rulemaking as well as to clarify what aspects of agencies' use of electronic media this article is, and is not, principally aimed at addressing. It is not, for example, focused on the federal rulemaking portal, Regulations.gov, which has already been the subject of several detailed reports offering numerous recommendations. Nor does it provide an in-depth assessment of the Department of Transportation-Cornell University collaboration on Regulation Room, which also has generated separate assessments by those involved in its development.

In Part II of this article, I provide illustrative descriptions of a broad range of e-rulemaking practices that exist beyond just Regulations.gov or Regulation Room, in order to draw particular attention to the ways that agencies have used websites and social media in connection with rulemaking. This second part of this article highlights what might be considered current "best practices" across the federal government in the use of electronic media to support rulemaking. It makes concrete the various existing efforts to use electronic media at the federal level and provides a baseline against which to consider recommendations for further improvements.

In Part III, I discuss the results of a systematic study of the characteristics and features of ninety federal agency websites. This study replicates a similar website study from about five years ago and extends its focus to encompass agencies' use of social media. Accordingly, this study provides a comprehensive account of the differences that continue to exist across federal agency websites and of the remaining opportunities to make improvements in how rulemaking information is provided through these sites.

In Part IV, I synthesize the findings from a series of interviews conducted with officials at ten regulatory agencies about their use of electronic media to support rulemaking. These interviews were intended to supplement the quantitative analysis of agency websites, providing qualitative insights from those directly involved in the development and management of electronic media within the federal government.

Finally, in Part V, drawing upon my findings in Parts II, III, and IV, I present and explain a series of seven recommendations to enhance public participation in e-rulemaking. These recommendations are intended as additional inputs into the ongoing management processes within and across

^{8.} Cary Coglianese, Heather Kilmartin & Evan Mendelson, Transparency and Public Participation in the Federal Rulemaking Process: Recommendations for the New Administration, 77 GEO. WASH. L. REV. 924, 939–41 (2009); COMM. ON THE STATUS AND FUTURE OF FED. E-RULEMAKING, ACHIEVING THE POTENTIAL: THE FUTURE OF FEDERAL E-RULEMAKING (2008), available at http://ceri.law.cornell.edu/documents/report-web-version.pdf. I was a member of the Committee on the Status and Future of Federal e-Rulemaking.

^{9.} Cynthia R. Farina et al., *Rulemaking 2.0*, 65 U. MIAMI L. REV. 395 (2011).

agencies that aim to make websites and other uses of electronic media "a bright spot for government in years to come." ¹⁰

I. THE DEVELOPMENT AND GOALS OF E-RULEMAKING

Throughout the past several decades, administrative agencies in the United States have increasingly relied upon digital technology to increase transparency and expand public participation in the rulemaking process. This use of electronic media by regulatory agencies has come to be known as "e-rulemaking."

As early as 1988, the Administrative Conference of the United States (ACUS), a federal agency that seeks to identify and recommend governmental best practices, adopted recommendations on the release of computer-stored information, noting that "[n]ew information technologies can improve public access to public information." In 1990, ACUS reaffirmed that "[c]hanges in the format of agency information from paper to existing and future electronic media [should] not reduce the accessibility of information to the public." A few years later, the Clinton Administration's National Performance Review recommended that agencies "increase use of information technology" in the rulemaking process. In 1996, Congress passed the Clinger-Cohen Act which called upon agencies to improve their management of information technology so as to, among other things, improve the "dissemination of public information."

Starting in the 1990s, agencies began to use the Internet in earnest to communicate with the public about rulemaking and other important functions and services. The Federal Register and the Code of Federal Regulations

^{10.} Citizen Satisfaction with Federal Government Services Plummets, supra note 5.

^{11.} Admin. Conf. of the U.S., Recommendation 88-10: Federal Agency Use of Computers in Acquiring and Releasing Information, 1 C.F.R. § 305.88-10 (1988), available at http://www.acus.gov/wp-content/uploads/2011/10/88-10.pdf; see also Henry H. Perritt, Electronic Acquisition and Release of Federal Agency Information: Analysis of Recommendations Adopted by the Administrative Conference of the United States, 41 ADMIN. L. REV. 253, 255 (1989); Admin. Conf. of the U.S., Recommendation 89-8: Agency Practices and Procedures for the Indexing and Public Availability of Adjudicatory Decisions, 1 C.F.R. § 305.89-8 (1989), available at http://www.acus.gov/wp-content/uploads/2011/10/89-8.pdf.

^{12.} Admin. Conf. of the U.S., Recommendation 90-5: Federal Agency Electronic Records Management and Archives, 1 C.F.R. § 305.90-5 (1990), available at http://www.law.fsu.edu/library/admin/acus/305905.html.

^{13.} NAT'L PERFORMANCE REVIEW, IMPROVING REGULATORY SYSTEMS: ACCOMPANYING REPORT OF THE NATIONAL PERFORMANCE REVIEW 39 (1993), available at http://babel.hathitrust.org/cgi/pt?id=umn.31951d00276063h.

^{14.} Pub. L. No. 104-106, § 5112(b), 110 Stat. 680 (codified at 40 U.S.C. § 11302(b) (2006)).

became available to the public online,¹⁵ and Congress amended FOIA in an attempt to facilitate the greater disclosure of electronic information.¹⁶ Agencies started to create online docket rooms and to accept public comments submitted by e-mail.¹⁷ In some rulemakings, electronically submitted comments numbered in the tens of thousands.¹⁸

With the dawn of the new century, interest in e-rulemaking grew. Congress passed the E-Government Act in 2002, requiring federal agencies to accept electronically-submitted public comments on rules and to publish regulatory dockets online.¹⁹ Several large regulatory agencies, such as the Department of Transportation (DOT) and the Environmental Protection Agency (EPA), established their own online docket systems to facilitate access to digital copies of rulemaking documents.²⁰ Although few other agencies took steps to create online docket systems, some did develop electronic dialogues over proposed rules that "actively encourage[d] considered back-and-forth conversation."

In its first term, the George W. Bush Administration took steps to centralize e-rulemaking. In January 2003, it rolled out a centralized web-based portal for rulemaking information known as Regulations.gov, which was envisioned both as a one-stop shop for information about rulemaking across the entire federal government as well as a central input site for public comments.²² Two years later, Regulations.gov came to be supported by a Federal Docket Management System that could house in one central elec-

^{15.} Cary Coglianese, E-Rulemaking: Information Technology and the Regulatory Process, 56 ADMIN. L. REV. 353, 363 (2004) [hereinafter Coglianese, Information Technology].

^{16.} Electronic Freedom of Information Act Amendments of 1996, Pub. L. No. 104-231, 110 Stat. 3048 (amending 5 U.S.C. § 552).

^{17.} Coglianese, Information Technology, supra note 15, at 364.

^{18.} For further discussion of the history of e-rulemaking, see Coglianese, *Information Technology*, *supra* note 15, at 363–66. Subsequent empirical analysis has failed to find that the introduction of electronic submissions of comments made any systemic impact on the number of comments agencies received, even though for a few highly salient rules the number of comments did appear to increase. *See* Cary Coglianese, *Citizen Participation in Rulemaking: Past, Present, and Future*, 55 DUKE L.J. 943, 954–58 (2006) [hereinafter Coglianese, *Citizen Participation*]; Steven J. Balla & Benjamin M. Daniels, *Information Technology and Public Commenting on Agency Regulations*, 1 REG. & GOVERNANCE 46, 60 (2007).

^{19.} E-Government Act of 2002, Pub. L. No. 107-347, § 206(c)–(d), 116 Stat. 2899, 2916 (2002) (codified at 44 U.S.C. § 3501).

^{20.} Coglianese, *Information Technology*, *supra* note 15, at 364–65. An online docket system makes available via the internet the reports, comments, and other materials that had previously been stored in paper form in files or boxes within agency offices or sometimes in microfiche. *See* COMM. ON THE STATUS AND FUTURE OF FED. E-RULEMAKING, *supra* note 8, at 61 (defining "docket" and "docket management system").

^{21.} Thomas C. Beierle, *Discussing the Rules: Electronic Rulemaking and Democratic Deliberation* 7 (Res. for the Future, Discussion Paper No. 03-22, 2003), http://www.rff.org/rff/documents/RFF-DP-03-2.pdf.

^{22.} See Coglianese, Citizen Participation, supra note 18, at 946.

tronic location rulemaking information that otherwise had been kept in disparate paper and electronic dockets scattered across the federal government. By 2008, it could be said that "[m]ore than 170 different rulemaking entities in 15 Cabinet Departments and some independent regulatory commissions [were] using a common database for rulemaking documents, a universal docket management interface, and a single public website for viewing proposed rules and accepting on-line comments." ²⁴

Regulations.gov has garnered considerable attention from academic observers as well as governmental practitioners. Although Regulations.gov has received many plaudits, ²⁵ it has been subjected to its share of criticism too. Some observers, for example, have faulted the completeness of the information Regulations.gov purports to contain, the usability of its search function, and the overall complexity of its design. ²⁶ Agency officials, governmental auditors, and independent expert panels have scrutinized Regulations.gov, offering numerous recommendations for its improvement in management, functionality, and design. ²⁷ In response to these suggestions, Regulations.gov has been modified considerably over the years, so that the site's functionality has markedly improved over its initial design. Although more improvements can surely be made, the developers of Regulations.gov have no shortage of recommendations to consider, so this article focuses instead on agencies' websites and use of social media, both of which warrant their own study. ²⁸

Whether with the government's use of Regulations.gov, websites, or social media tools in mind, information technology's proponents have em-

^{23.} Id. & 946 n.11.

^{24.} COMM. ON THE STATUS AND FUTURE OF FED. E-RULEMAKING, *supra* note 8, at 3.

^{25.} A page on the Regulations.gov website lists all of its awards. *About Us: Awards and Recognition*, REGULATIONS.GOV, http://www.regulations.gov/#!aboutAwards (last visited July 13, 2011). In addition, the General Services Administration and the Federal Web Managers Council have listed Regulations.gov as an example of a "best practice" in a governmental website for its effort to consolidate regulatory information and reduce duplication across agencies. *See Agency Examples*, HOWTO.GOV, http://www.howto.gov/web-content/requirements-and-best-practices/agency-examples (last visited June 16, 2011).

^{26.} For a summary of such complaints, see Farina et al., supra note 9, at 403-04.

^{27.} Jeffrey S. Lubbers, A Survey of Federal Agency Rulemakers' Attitudes About E-Rulemaking, 62 Admin. L. Rev. 451 (2010); Coglianese, Kilmartin & Mendelson, supra note 8; COMM. ON THE STATUS AND FUTURE OF FED. E-RULEMAKING, supra note 8; CURTIS W. COPELAND, CONG. RESEARCH SERV., RL 34210, ELECTRONIC RULEMAKING IN THE FEDERAL GOVERNMENT 37–42 (2008), available at http://www.fas.org/sgp/crs/misc/RL34210.pdf; U.S. GOV'T ACCOUNTABILITY OFFICE, GAO-10-872T, ELECTRONIC RULEMAKING: EFFORTS TO FACILITATE PUBLIC PARTICIPATION CAN BE IMPROVED 29 (2003), available at http://www.gao.gov/new.items/d03901.pdf.

^{28.} Assessments of the Department of Transportation's use of the Regulation Room developed by researchers at Cornell University would also be informative, but as others are already engaged in such analysis, Regulation Room is treated as outside the scope of this study. See Farina et al., supra note 9.

phasized several distinct, potentially complementary goals for the use of electronic media in the rulemaking process: (1) promoting democratic legitimacy, (2) improving policy decisions, and (3) lowering administrative costs.²⁹ First, information technology can be designed to help inform the public about prospective decisions and thereby enable members of the public to provide input to governmental decision makers that is both more meaningful as well as more frequent.³⁰ Second, information technology can enhance the quality of public policy decisions.³¹ One way it does so is by facilitating participation by a broader set of experts and other knowledgeable commentators. As I have written elsewhere, "[t]he local sanitation engineer for the City of Milwaukee . . . will probably have useful insights about how new EPA drinking water standards should be implemented that might not be apparent to the American Water Works Association representatives in Washington, DC."32 In other words, information technology better allows government officials to tap into what President Obama's former administrator of the Office of Information and Regulatory Affairs (OIRA), Cass R. Sunstein, has called the public's "dispersed knowledge." 33 As President Obama has himself indicated, "public officials benefit from having access to that dispersed knowledge."34 Finally, information technology can lower administrative costs.³⁵ Well-designed information systems can enable agency staff to increase their productivity, reduce the costs of replying to FOIA requests, and eliminate overlapping reporting requirements.

Each of these goals can be found in the Obama Administration's Open Government Initiative. On his first day in office, President Obama issued a government-wide memorandum calling upon agencies to promote transparency, public participation, and collaboration, reasoning that "[o]penness will strengthen our democracy and promote efficiency and effectiveness in Government."

^{29.} Coglianese, *Information Technology*, supra note 15, at 372; see also Farina et al., supra note 9, at 407–08 (dividing the goal of improving policy so as to generate a four-fold set of goals: (1) "regulatory democracy," (2) "new information," (3) "better policy," and (4) "doing more with less").

^{30.} Coglianese, Information Technology, supra note 15, at 372-74.

^{31.} Id. at 374.

^{32.} Cary Coglianese, Weak Democracy, Strong Information: The Role of Information Technology in the Rulemaking Process, in GOVERNANCE AND INFORMATION TECHNOLOGY: FROM ELECTRONIC GOVERNMENT TO INFORMATION GOVERNMENT 101, 117 (Viktor Mayer-Schönberger & David Lazer eds., 2007).

^{33.} Cass R. Sunstein, Infotopia: How Many Minds Produce Knowledge (2006).

^{34.} Memorandum on Transparency and Open Government, 2009 DAILY COMP. PRES. DOC. 10 (Jan. 21, 2009).

^{35.} Coglianese, Information Technology, supra note 15, at 376.

^{36.} Memorandum on Transparency and Open Government, *supra* note 34.

Elaborating on the principles outlined in the President's memo, the Office of Management and Budget (OMB) subsequently called upon agencies to increase their use of the Internet to advance the President's goals.³⁷ OIRA further clarified that "the Internet should ordinarily be used [by agencies] as a means of disclosing information, to the extent feasible and consistent with law."³⁸ In early 2011, President Obama issued an executive order on regulation that called upon agencies to "afford the public a meaningful opportunity to comment through the Internet on any proposed regulation" and urged agencies to use the online dockets accessible via Regulations.gov.³⁹ More recently, he has issued a further executive order, as part of a broader effort to improve customer service, that calls upon agencies to develop better ways of serving the public via the Internet.⁴⁰ The clear signal from the current administration—and a signal extending back to the earliest days of e-rulemaking—has been for agencies to use electronic media to engage early and often with the public.

II. CURRENT USES OF THE INTERNET AND AGENCY RULEMAKING

Around the world, "nearly all governments have websites." The World Wide Web provides a platform for governments to communicate with their citizens and with other individuals and organizations, for members of the public to communicate with government officials, and for both government officials and the public to interact with each other using web-based tools and media. In these ways, information technology has assertedly "empow-

^{37.} Memorandum from Peter R. Orszag, Dir., Office of Mgmt. & Budget, on the Open Government Directive, to the Heads of Exec. Dep'ts & Agencies 1 (Dec. 8, 2009), available at http://www.whitehouse.gov/sites/default/files/omb/assets/memoranda_2010/m10-06.pdf.

^{38.} Memorandum from Cass R. Sunstein, Adm'r, Office of Info. & Reg. Affairs, on Disclosure and Simplification as Regulatory Tools to the Heads of Exec. Dep'ts & Agencies 6 (Jun. 18, 2010), available at http://www.whitehouse.gov/sites/default/files/omb/assets/inforeg/disclosure_principles.pdf.

^{39.} Exec. Order. No. 13,563, 76 Fed. Reg. 3821, 3821–22 (Jan. 21, 2011); see also Cary Coglianese, New Executive Order Promotes Public Participation, REGBLOG (Jan. 18, 2011), http://www.law.upenn.edu/blogs/regblog/2011/01/new-regulation-executive-order-promotes-public-participation.html.

^{40.} Exec. Order No. 13,571, 76 Fed. Reg. 24,339 (May 2, 2011). In implementing this executive order, the Obama Administration plans both to seek public input on ways to improve agency use of the Internet and to update federal guidelines on the development of agency websites. The Open Gov't P'ship, National Action Plan for the United States of America 8 (Sep. 20, 2011), available at http://www.whitehouse.gov/sites/default/files/us_national_action_plan_final_2.pdf.

^{41.} U.N. DEP'T OF ECON. & SOC. AFFAIRS, U.N. E-GOVERNMENT SURVEY 2010: LEVERAGING E-GOVERNMENT AT A TIME OF FINANCIAL AND ECONOMIC CRISIS, at 77 Figure 4.6, U.N. Doc. ST/ESA/PAD/SER.E/131, U.N. Sales No. E.10.II.H.2 (2010), available at http://unpan1.un.org/intradoc/groups/public/documents/un/unpan038851.pdf.

ered citizens to become more active in expressing their views on many issues, especially on issues concerning environment, health, education and other areas of government policy."⁴²

Enthusiasm about e-government has contributed to a proliferation of uses of electronic media by U.S. regulatory agencies. A complete accounting of all federal government uses of electronic media in connection with rulemaking would be an expansive undertaking; however, even a brief review of highlights in this area reveals a striking breadth of innovation and provides, in combination with the original data collection reported in Parts III and IV of this article, a useful point of reference for recommendations to federal agencies, as the best of these current agency practices are obvious candidates for emulation by other agencies. Regulatory agencies have constructed new websites specifically to support public access to and participation in their rulemaking proceedings, and they have also begun to use social media tools to support their rulemaking efforts. In addition, as discussed in this Part, several government-wide initiatives as well as private projects have emerged that either make rulemaking information available to Internet users or otherwise seek to facilitate public involvement in agency rulemaking.

A. Agency Websites

Each regulatory agency has its own website, replete with information about all aspects of its operations and activities. In Part III, I report on the findings of a comprehensive study of both the general features of these individual agency websites as well as specific features related to rulemaking. Here it is helpful to note that a few agencies have recently developed highly specialized portions of their own websites to support their overall rulemaking efforts. These practices deserve to be highlighted as the kind of efforts that all major rulemaking agencies should consider.

The Commodity Futures Trading Commission (CFTC)⁴³ maintains a specialized webpage entitled "Public Comments," which allows users to submit and view comments on all of the CFTC's open rulemakings (Figure 1).⁴⁴ The CFTC also maintains a separate webpage for all of the rules proposed under the Dodd-Frank Act.⁴⁵ Links from the CFTC homepage

^{42.} Id. at 84.

^{43.} U.S. COMMODITY FUTURES TRADING COMMISSION, http://www.cftc.gov (last visited June 6, 2011).

^{44.} *Public Comments*, U.S. COMMODITY FUTURES TRADING COMMISSION, http://comments.cftc.gov/PublicComments/ReleasesWithComments.aspx (last visited June 6, 2011).

^{45.} Dodd-Frank Proposed Rules, U.S. COMMODITY FUTURES TRADING COMMISSION, http://www.cftc.gov/LawRegulation/DoddFrankAct/Dodd-FrankProposedRules/index.htm (last visited June 14, 2011); see infra Figure 8 and notes 181–84 and accompanying text.

take users to both webpages. At these webpages, users may submit their own comments as well as sort and search for comments that others have submitted. A help feature explains how to use the website to submit a comment on the proposed rules.⁴⁶

FIGURE 1: U.S. COMMODITY FUTURE TRADING COMMISSION'S PUBLIC COMMENTS WEBPAGE



Source: http://comments.cftc.gov/PublicComments/ReleasesWithComments.aspx (last visited May 23, 2011)

The Environmental Protection Agency (EPA) has created a website that the agency initially called its "Rulemaking Gateway" but now calls a "Regulatory Development and Retrospective Review Tracker"—or what the agency refers to as "Reg DaRRT" for short. As the agency has described, Reg DaRRT "provides information to the public on the status of the EPA's priority rulemakings and retrospective reviews of existing regulations." EPA priority rulemakings appear on Reg DaRRT soon after the agency's

^{46.} How to Submit a Comment, U.S. COMMODITY FUTURES TRADING COMMISSION, http://www.cftc.gov/LawRegulation/PublicComments/HowtoSubmit/index.htm (last visited June 14, 2011).

^{47.} Reg DaRRT, U.S. ENVTL. PROTECTION AGENCY, http://yosemite.epa.gov/opei/RuleGate.nsf/ (last visited Oct. 14, 2011). Reg DaRRT was previously named the Rulemaking Gateway, but was renamed on August 22, 2011. See Recent Upgrades, U.S. ENVTL. PROTECTION AGENCY, http://yosemite.epa.gov/opei/RuleGate.nsf/content/upgrades.html (last visited Oct. 14, 2011). Reg DaRRT contains the same basic design as the Gateway and much of the same features. It differs in that Reg DaRRT no longer provides an easy way to identify and provide input on EPA rules open for comment, see infra notes 189–192 and accompanying text, but it also allows users to view the agency's retrospective reviews of existing regulations. Recent Upgrades, supra. The transition from Rulemaking Gateway to Reg DaRRT occurred after the empirical study for this article had been completed.

Regulatory Policy Officer approves their commencement, typically appearing online well in advance of the appearance of any notice of the rulemaking in the semiannual regulatory agenda or in any *Federal Register* notice. Reg DaRRT enables the public to track rulemakings from the earliest pre-proposal stage through to completion. To facilitate commenting, Reg DaRRT provides users with instructions on how to comment on a regulation on Regulations.gov. Users may view all Reg DaRRT rules in one list or may sort through them by their phase in the rulemaking process or by other criteria. In response to Executive Order 13,563, Reg DaRRT also allows users to view the EPA's retrospective reviews of current regulations. Figures 2 and 3 provide screenshots of Reg DaRRT. Figure 2 shows its homepage, while Figure 3 shows its display of the full list of EPA rules on Reg DaRRT.

FIGURE 2: U.S. ENVTL. PROT. AGENCY REG DARRT: HOMEPAGE



Source: http://www.epa.gov/regdarrt (last visited Oct. 14, 2011)

^{48.} About Reg DaRRT, U.S. ENVTL. PROTECTION AGENCY, http://yosemite.epa.gov/opei/RuleGate.nsf/content/about.html?opendocument (last visited Oct. 14, 2011).

^{49.} Reg DaRRT, supra note 47.

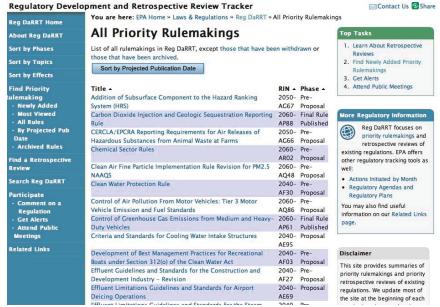
^{50.} Comment on a Regulation, U.S. ENVTL. PROTECTION AGENCY, http://yosemite.epa.gov/opei/RuleGate.nsf/content/phasescomments.html?opendocument (last visited Oct. 14, 2011).

^{51.} Reg DaRRT, supra note 47.

^{52.} Exec. Order. No. 13,563, 76 Fed. Reg. 3821, 3822 (Jan. 21, 2011) (requiring that agencies conduct "retrospective analyses of existing regulations").

^{53.} Reg DaRRT, supra note 47.

FIGURE 3: U.S. ENVTL. PROT. AGENCY REG DARRT: RULES LIST



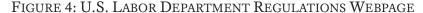
Source: http://yosemite.epa.gov/opei/RuleGate.nsf/content/allrules.html?opendocument (last visited Oct. 14, 2011)

Many other agency websites contain pages dedicated to regulations. The CFTC and EPA sites are distinctive, though, in that they provide an easily accessible but comprehensive list of the agencies' proposed rules. The Department of Labor's website, by way of contrast, includes a page devoted to regulations where users can find links to the Department's regulatory agenda and other helpful information (Figure 4). The "featured items" on the page include only a subset of actions from the agency's regulatory agenda, presumably ones that agency managers think will be of the greatest interest to the public. ⁵⁴ Only toward the bottom of the webpage does a box appear that is labeled "Other Regulations Currently Open for Comment;" as of July 2011, it contained listings for only three of the agency's rule-makings.

B. Social Media

Social media may provide agencies with a potentially powerful tool for "get[ting] public input on pending proposed rules in the early planning

^{54.} DOL Regulations, U.S. DEP'T LABOR, http://www.dol.gov/regulations (last visited July 17, 2011).





Source: http://www.dol.gov/regulations/ (last visited July 17, 2011)

stages," as suggested by Professor Beth Noveck, former United States Deputy Chief Technology Officer and former director for the White House Open Government Initiative. Social media tools include blogs, Facebook, Twitter, IdeaScale, and other online discussion platforms. These tools have raised some questions about how best to deal with privacy and security concerns as well as how to handle records management and FOIA requests. Nevertheless, agencies increasingly use them for diverse purposes.

For example, the United States Forest Service, located in the Department of Agriculture, recently published a Forest Planning Rule that it had developed with the assistance of a dedicated website and blog (Figure 5). The Forest Service created a website solely for this rulemaking on which it posted announcements, news releases, and other relevant information. To create a forum for public deliberation, the Forest Service also created a

^{55.} Alice Lipowicz, *Use Digital Tools for Better Rulemaking, Former Official Advises*, FED. COMPUTER WK. (Jan. 26, 2011), http://fcw.com/Articles/2011/01/26/Former-White-House-deputy-CTO-advises-immediate-actions-for-improved-erulemaking.aspx.

^{56.} *Id*

^{57.} Gregory C. Wilshusen, U.S. Gov't Accountability Office, GAO-10-872T, Information Management: Challenges in Federal Agencies' Use of Web 2.0 Technologies 1 (2010), available at http://www.gao.gov/new.items/d10872t.pdf.

^{58.} Planning Rule, U.S. DEP'T AGRIC., http://fs.usda.gov/planningrule (last visited June 17, 2011).

^{59.} *Id*.

FIGURE 5: U.S. FOREST SERVICE FOREST PLANNING RULE BLOG



Proposed Rule Released: Continuing Engagement to Collaboratively Develop the Forest Service Planning Rule Public Submits Nearly 300,000 Comments on the Proposed Rule



Source: http://planningrule.blogs.usda.gov/ (last visited July 17, 2011)

blog on which users could offer input.⁶⁰ Although comments on the blog were not considered "official formal comments" of the type normally filed in response to a notice of proposed rulemaking in the *Federal Register*, the Service encouraged participation and received over 300 comments via the blog that helped inform the proposal development.⁶¹

Federal agencies have also turned to more popular online platforms, such as Facebook and Twitter. Facebook allows users to sign up and create what is effectively their own personal webpage.⁶² Each Facebook page has

^{60.} U.S. Forest Service Forest Planning Rule Blog, U.S. DEP'T AGRIC., http://planningrule.blogs.usda.gov (last visited June 17, 2011).

^{61.} Overall Collaboration and Public Involvement Strategy, U.S. DEP'T AGRIC., http://www.fs.usda.gov/detail/planningrule/collaboration/?cid=STELPRDB5136341 (last visited Mar. 8, 2012) ("The Planning Rule Blog has received more than 300 comments since it was launched in December 2009."); U.S. Forest Service Forest Planning Rule Blog, supra note 60 (noting that "comments to this blog do not constitute formal comments . . . [and that o]fficial formal comments must be submitted during formal comment periods"). The blog elicited only somewhat more than 300 comments, while the total number of comments received overall, through means other than the blog, exceeded 300,000. See Collaboration & Public Involvement, U.S. DEP'T AGRIC., http://www.fs.usda.gov/main/planningrule/collaboration (last visited June 24, 2012).

^{62.} See FACEBOOK, http://www.facebook.com (last visited June 6, 2011).

its own web address and contains information its owner wishes to allow other users to view, including updates displayed on a virtual "wall." Visitors to a personal profile can post messages on the wall that are visible to both the owner and other visitors. Owners and visitors can also post pictures, videos, and links to other websites. Although originally intended for individual persons, Facebook now is a popular venue for commercial, non-profit, and governmental organizations. For example, the EPA maintains an active Facebook page, updating its wall almost daily with links to news articles, photos submitted by members of the public, videos of projects by university students, job postings, and other pieces of information. Only on occasion, though, does the EPA post information on Facebook specifically pertaining to any of its rulemakings.

Twitter allows users to post and receive short messages known as "tweets." A user may choose to "follow" other users' tweets, receiving tweets whenever they are posted by way of a customized page that lists the most recent tweets from the users that one is following. Although tweets are limited to no more than 140 characters, they may contain links to other media, such as websites, photos, and videos. One advantage of tweets' limited size is that they can be transmitted through both computers and handheld devices, allowing instantaneous and on-the-go access to information. Numerous regulatory agencies use Twitter. The EPA, for example, maintains numerous Twitter accounts, ranging from EPAnews (for press releases), EPAgov (for general announcements), and EPAresearch (for research announcements), not to mention separate accounts for EPA's various regional offices. The Securities and Exchange Commission (SEC) similarly has a news account on Twitter, SEC_News,

^{63.} *Id*.

^{64.} *Id*.

^{65.} *Id*.

^{66.} U.S. Environmental Protection Agency, FACEBOOK, http://www.facebook.com/EPA (last visited June 6, 2011).

^{67.} See id.

^{68.} About Twitter, TWITTER, http://twitter.com/about (last visited May 26, 2012).

^{69.} See id.

^{70.} See id.

^{71.} See id.

^{72.} US EPA News, TWITTER, http://twitter.com/EPAnews (last visited June 14, 2011).

^{73.} U.S. EPA, TWITTER, http://twitter.com/EPAgov (last visited June 14, 2011).

^{74.} US EPA Research, TWITTER, http://twitter.com/EPAresearch (last visited June 14, 2011).

^{75.} E.g., US EPA Mid-Atlantic, TWITTER, http://twitter.com/EPAregion3 (last visited June 14, 2011).

^{76.} SEC_News, TWITTER, http://twitter.com/SEC_News (last visited June 14, 2011).

as well as an account for information related to legal filings, SEC_Litigation.⁷⁷

Ideascale is a web-based "crowdsourcing" software that government agencies have started to use to structure public input and dialogue. The software allows users to post their ideas to a webpage where other users can discuss and vote on these ideas. The software keeps track of which ideas received the most votes and discussion, and then it ranks the discussions and ideas according to popularity. The most popular ideas are automatically placed at the top of the page. The White House has used IdeaScale to develop its agenda for its Open Government Initiative; the Federal Communications Commission (FCC) has used it in developing its National Broadband Plan; and the Department of Labor has used it to obtain public suggestions and comments on proposed regulations.

The White House is currently in the process of creating what it considers a "next generation public engagement platform," known as ExpertNet. ⁸⁵ True to its billing, the platform is being developed using public input provided through a wiki set up by the White House. ⁸⁶ The platform is intended to facilitate a structured dialogue by allowing government officials to post discussion topics on current policy concerns and by attracting contributions from experts.

C. Government-Wide Websites and Resources

As already noted, Regulations.gov, which is managed by EPA, provides online access to regulatory documents prepared by or submitted to agencies from across the federal government.⁸⁷ Members of the public can also sub-

^{77.} The Twitter account SEC_Litigation was removed during the writing of this article. For a similar SEC Twitter account, see *SEC_Enforcement*, TWITTER, http://twitter.com/SEC_Enforcement (last visited June 14, 2011).

^{78.} IDEASCALE, http://ideascale.com/opengov (last visited June 6, 2011).

^{79.} *Id*.

^{80.} Id.

^{81.} *Id*

^{82.} Open Government Dialogue, IDEASCALE, http://opengov.ideascale.com (last visited June 6, 2011).

^{83.} Broadband.gov, IDEASCALE, http://broadband.ideascale.com (last visited June 6, 2011).

^{84.} Department of Labor Regulations Review, IDEASCALE, http://dolregs.ideascale.com (last visited June 6, 2011).

^{85.} David McClure, ExpertNet: Two More Weeks to Weigh In, WHITE HOUSE (Jan. 6, 2011, 2:53 PM), http://www.whitehouse.gov/blog/2011/01/06/expertnet-two-more-weeks-weigh.

^{86.} *Id.*; see also Expert Net, WIKISPACES, http://expertnet.wikispaces.com/Getting+Started (last visited June 6, 2011).

^{87.} REGULATIONS.GOV, http://www.regulations.gov (last visited June 8, 2011). Regulations.gov reports that "there are nearly 300 agencies whose rules and regulations are

mit comments on proposed rules via Regulations.gov. ⁸⁸ Regulations.gov now shows users which regulations have garnered the most comments ⁸⁹ and also lists on its homepage newly posted regulations and regulations with open comment periods. ⁹⁰ The site contains both simple ⁹¹ and advanced ⁹² search options.

A separate website, Reginfo.gov, serves as the online location of the Unified Agenda of Federal Regulatory and Deregulatory Actions—otherwise known as the semiannual regulatory agenda because it is published twice every year, once in the spring and once in the fall. ⁹³ The agenda contains lists of rulemakings for all federal agencies, sorted by stage of regulatory development (e.g., proposed rules versus final rules). ⁹⁴ Users can also search for rulemakings by a Regulation Identifier Number (RIN), which is given to every rulemaking as it commences. ⁹⁵

Reginfo.gov also dedicates a separate webpage—the "Regulatory Review Dashboard"—to proposed rules currently under review by OIRA. He Dashboard uses pie charts and bar graphs to display data on the number of rules by agency, rule stage, length of review, and economic significance. This part of the site includes its own search engine and provides access to archives of OIRA's past reviews.

In addition to Regulations.gov and Reginfo.gov, both of which are specifically devoted to regulation, several other government-wide websites bear noting. FDsys.gov is the homepage of the Federal Digital System (FDsys),

posted to [the site]." About Us, REGULATIONS.GOV, http://www.regulations.gov/#!about Partners (last visited Oct. 3, 2011).

- 88. REGULATIONS.GOV, supra note 87.
- 89. Site Data, REGULATIONS.GOV, http://www.regulations.gov/#!siteData (last visited June 15, 2012).
 - 90. REGULATIONS.GOV, supra note 87.
 - 91. *Id*.
- 92. Advanced Search, REGULATIONS.GOV, http://www.regulations.gov/#!advancedSearch (last visited June 8, 2011).
- 93. Current Regulatory Plan and the Unified Agenda of Regulatory and Deregulatory Actions, REGINFO.GOV, http://www.reginfo.gov/public/do/eAgendaMain (last visited June 8, 2011).
- 94. E.g., Agency Rule List—Fall 2010, REGINFO.GOV, http://www.reginfo.gov/public/do/eAgendaMain?operation=OPERATION_GET_AGENCY_RULE_LIST¤tPubld=201010&showStage=active&agencyCd=0000 (last visited June 8, 2011).
- 95. Search of Agenda/Regulatory Plan, REGINFO.GOV, http://www.reginfo.gov/public/do/eAgendaSimpleSearch (last visited June 8, 2011).
- 96. Regulatory Review Dashboard, REGINFO.GOV, http://www.reginfo.gov/public/jsp/EO/eoDashboard.jsp (last visited June 6, 2011).
 - 97. Id
- 98. Search of Regulatory Review, REGINFO.GOV, http://www.reginfo.gov/public/do/eoAdvancedSearchMain (last visited June 6, 2011).
- 99. Historical Reports, REGINFO.GOV, http://www.reginfo.gov/public/do/eoHistoric Report (last visited June 6, 2011).

operated by the United States Government Printing Office (GPO). FDsys, a recent update of what had previously been known as GPO Access, makes legislative, executive, and judicial documents available online. In FDsys, for example, the user can find an electronic archive of the Federal Register, the executive branch's official publication and published source of all proposed and final rules.

The "Federal Register 2.0" website, managed by the National Archives and Records Administration (NARA) and GPO, provides a user-friendly interface to an online version of the *Federal Register*. ¹⁰² Federal Register 2.0 contains search capabilities and, for rulemakings, a timeline linking to all related *Federal Register* notices. ¹⁰³ For proposed rules still open for comment, Federal Register 2.0 provides a link to Regulations.gov, where a user may submit a comment. ¹⁰⁴

Finally, HowTo.gov provides a series of "best practice" guidelines for agencies in their development of websites, use of social media, and operation of contact centers. A "Tech Solutions" section of this site showcases technological innovations and explains how agencies can use them to improve their websites and other IT operations. HowTo.gov is the product of the Federal Web Managers Council, a group of senior government web managers organized under the auspices of the General Services Administration (GSA). The Web Council issues guidelines and recommendations

^{100.} Federal Digital System, U.S. GOV'T PRINTING OFF., http://www.gpo.gov/fdsys (last visited June 6, 2011).

^{101.} *Id.*

^{102.} About Us, FED. REG. 2.0, http://www.federalregister.gov/policy/about-us (last visited May 7, 2012). President Obama has announced that the Federal Register will no longer be printed in hard copy but instead will only be issued electronically. Robert Jackel, Federal Register Will No Longer Be Printed, Obama Says, REGBLOG (June 22, 2011), http://www.law.upenn.edu/blogs/regblog/2011/06/federal-register-will-no-longer-be-printed-obama-says.html.

^{103.} E.g., Hazardous Materials: Requirements for Storage of Explosives During Transportation, FED. REG. 2.0, http://www.federalregister.gov/articles/2011/06/07/2011-13837/hazardous-materials-requirements-for-storage-of-explosives-during-transportation (last visited June 8, 2011).

^{104.} E.g., Petition Requesting Safeguards for Glass Fronts of Gas Vented Fireplaces, FED. REG. 2.0, http://www.federalregister.gov/articles/2011/06/08/2011-14020/petition-requesting-safeguards-for-glass-fronts-of-gas-vented-fireplaces (last visited June 8, 2011).

^{105.} HOWTO.GOV, http://www.howto.gov (last visited June 6, 2011).

^{106.} Tech Solutions, HOWTO.GOV, http://www.howto.gov/tech-solutions (last visited June 8, 2011).

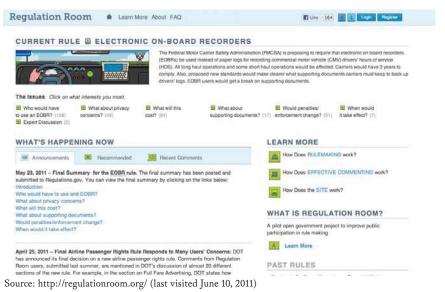
^{107.} Federal Web Managers Council, HOWTO.GOV, http://www.howto.gov/communities/federal-web-managers-council (last visited June 6, 2011).

aimed at "increas[ing] the efficiency, transparency, accountability, and participation between government and the American people." ¹⁰⁸

D. Nongovernmental Websites on Federal Rulemaking

In addition to governmental websites, several nongovernmental websites deserve mention. The Regulation Room¹⁰⁹ is an e-rulemaking pilot program co-sponsored by the Department of Transportation (DOT) and Cornell University that seeks to complement Regulations.gov (Figure 6).¹¹⁰

FIGURE 6: REGULATION ROOM



Although the Regulation Room website supports public dialogue over selected DOT rulemakings, it is not an official governmental site. 111 Users can submit comments and ask questions about a proposed DOT rule, and then their comments are synthesized by a Cornell faculty and student team who submit a summary report as an official comment. 112 To date, Regula-

^{108.} Fed. Web Managers Council, *Putting Citizens First: Transforming Online Government*, HOWTO.GOV, 1 (Nov. 2008), http://www.howto.gov/sites/default/files/documents/Federal_Web_Managers_WhitePaper.pdf.

^{109.} REG. ROOM, http://regulationroom.org (last visited June 6, 2011).

^{110.} Alice Lipowicz, *DOT e-Rulemaking Pilot Project Encounters Minor Glitch*, FED. COMPUTER WK. (Feb. 2, 2011), http://fcw.com/articles/2011/02/02/dot-erulemaking-pilot-project-encounters-minor-glitch.aspx.

^{111.} About Regulation Room, REG. ROOM, http://regulationroom.org/about (last visited June 6, 2011); FAQ, REG. ROOM, http://regulationroom.org/faq (last visited Mar. 8, 2012).

^{112.} About Regulation Room, supra note 111; FAQ, supra note 111.

tion Room has facilitated public discussion on a proposed rule that would ban texting by truckers and on another proposed rule that would force the disclosure of airline baggage fees. 113

An entirely private website, OpenRegs.com, allows users to locate recently proposed and recently promulgated regulations. Haintained by a research fellow at the Mercatus Center at George Mason University in collaboration with a web editor, OpenRegs.com claims to provide a more usable alternative to Regulations.gov and agency docket databases. The site lists both proposed regulations and final regulations after they are published in the *Federal Register*. Visitors may sort through these announcements by agency, topic, or date of publication. For proposed rules, the homepage also allows users to sort proposals by the comment period, finding proposals with comment periods that have recently opened or periods that soon will close. Through RSS feed and e-mail subscription features, users can be updated on new proposals. OpenRegs.com also includes options for commenting and tweeting, an editor's blog, and an iPhone app.

Finally, a website for researchers and analysts interested in the use of electronic media in rulemaking can be found at E-Rulemaking.org, a website maintained by the Penn Program on Regulation at the University of Pennsylvania Law School. ¹²³ E-Rulemaking.org contains research papers, government reports, news accounts, and links to governmental and nongovernmental websites related to information technology and the regulatory process.

^{113.} See Texting, REG. ROOM, http://regulationroom.org/texting (last visited June 15, 2012); Airline Passenger Rights, REG. ROOM, http://regulationroom.org/airline-passenger-rights (last visited June 15, 2012).

^{114.} OPENREGS.COM, http://openregs.com (last visited June 8, 2011).

^{115.} About, OPENREGS.COM, http://openregs.com/about (last visited June 8, 2011).

^{116.} OPENREGS.COM, supra note 114.

^{117.} *Id*.

^{118.} *Id*.

^{119.} Using This Site, OPENREGS.COM, http://openregs.com/learn/site (last visited June 8, 2011).

^{120.} See, e.g., Cotton Board Rules and Regulations: Adjusting Supplemental Assessment on Imports, OPENREGS.COM, http://openregs.com/regulations/view/108895/cotton_board_rules_and_regulations_adjusting_supplemental_assessment_on_imports (last visited June 8, 2011).

^{121.} Open for Comment, OPENREGS.COM, http://blog.openregs.com (last updated Jan. 26, 2010).

^{122.} *iPhone*, OPENREGS.COM, http://openregs.com/iphone (last visited June 8, 2011).

^{123.} E-RULEMAKING.ORG, http://www.law.upenn.edu/academics/institutes/regulation/erulemaking/ (last visited July 13, 2011). As the faculty director of the Penn Program on Regulation, I created E-Rulemaking.org and oversee its maintenance. The Program also operates other relevant webpages, including RegBlog.org and RuleFinder.org.

III. SYSTEMATIC ANALYSIS OF AGENCY WEBSITES AND RULEMAKING

As Part II has illustrated, agencies across the federal government—and even a few entities outside of government—are using electronic media in a variety of ways to inform and engage with the public over rulemaking. The most dominant method, of course, has been to provide information on an agency website, which has become each agency's "front door" to the public. 124 Just as the website has increasingly become the face of retail business, it has increasingly become the face of government. Accordingly, public officials and scholars looking to assess the quality of government in the digital age have increasingly turned to the website as their object of study. 1255

For the purpose of informing any recommendations on the use of electronic media to support rulemaking, it was necessary initially to review past research on agency websites and then to study the current state of agency websites, particularly with rulemaking in mind, to identify patterns and gaps in current practices. This Part reports the results of a study of ninety federal agency websites, providing insights to inform recommendations for improvement.

A. Past Research

In one of the earliest studies of agency websites, Genie Stowers issued a report in 2002 ranking federal agency websites based on their features, ¹²⁶ noting in particular a lack of attention to websites' accessibility to the disabled. ¹²⁷ The Congressional Management Foundation also conducted a study of websites for each Member of Congress in 2002, giving each site a grade based on a scorecard of qualities such as "audience," "content," "interactivity," "usability," and "innovations." ¹²⁸ A few years later, a study on digital government by Brookings Institution scholar Darrell West again singled out the website for analysis, studying legislative, executive, and judicial websites at both the federal and state levels in the United States. ¹²⁹ West found

^{124.} Telephone Interview, *supra* note 4 and accompanying text.

^{125.} See infra Part III.A.

^{126.} Genie N. L. Stowers, *The State of Federal Websites: The Pursuit of Excellence*, IBM CTR. FOR BUS. GOV'T, 23 tbl.4 (Aug. 2002), http://www.businessofgovernment.org/sites/default/files/FederalWebsites.pdf.

^{127.} Id. at 19.

^{128.} NICOLE FOLK ET AL., CONGRESSIONAL MANAGEMENT FOUNDATION, CONGRESS ONLINE 2003: TURNING THE CORNER ON THE INFORMATION AGE 3 (2003), available at http://www.congressfoundation.org/storage/documents/CMF_Pubs/congressonline2003.pdf.

^{129.} DARRELL M. WEST, DIGITAL GOVERNMENT (2005).

that, at least as of 2005, "many government websites [were] not offering much in the way of online services." ¹³⁰

Since 2002, the United Nations (UN) has annually assessed government websites around the world. The UN has specifically examined how governments are using websites and Web portals to deliver public services and expand opportunities for citizens to participate in decision-making. Based on the latest survey, conducted in 2010, the United States appears to have made progress since the time of West's study. The United States ranked second to Korea across the world in terms of overall quality of egovernment, a measure which takes into account the online availability of government services, the extent and penetration of the Internet and telecommunications technology across the country, and the overall level of literacy and educational attainment in the country.

The UN has separately studied each country's "use of the Internet to facilitate provision of information by governments to citizens ('e-information sharing'), interaction with stakeholders ('e-consultation'), and engagement in decision making processes ('e-decision making')." On this measure, known as the "e-participation index," the United States ranked first in the world in the UN study released in 2008. In developing a subsequent report, the UN changed its method of indexing, such that in 2010 the United States ranked only sixth in the world in terms of e-participation, a function both of a scoring of websites and a scoring for "citizen-empowerment." A separate UN assessment of just the "quality" of countries' websites in terms of e-participation placed the United States even lower in the rankings. 138

In addition to providing these overall rankings, the UN researchers asked about the internal features or characteristics of government websites. For example, across the globe, the UN found that "[s]ite maps can be found on [only] slightly over 50 percent of national portals . . . [despite a map

^{130.} *Id.* at 67–69.

^{131.} See Stephen A. Ronaghan, U.N. Dep't of Econ. & Soc. Affairs and Am. Soc'y for Pub. Admin., Benchmarking E-government: A Global Perspective (2002), available at http://unpan1.un.org/intradoc/groups/public/documents/un/unpan021547.pdf.

^{132.} U.N. DEP'T OF ECON. & SOC. AFFAIRS, supra note 41, at 59.

^{133.} Id. at 60.

^{134.} *Id.* at 109–13.

^{135.} Id. at 113.

^{136.} U.N. Dep't of Econ. & Soc. Affairs, U.N. E-Government Survey 2008: From E-Government to Connected Governance 58, U.N. Doc. ST/ESA/PAD/SER.E/112, U.N. Sales No. E.08.II.H.2 (2008), available at http://unpan1.un.org/intradoc/groups/public/documents/un/unpan028607.pdf.

^{137.} U.N. DEP'T OF ECON. & SOC. AFFAIRS, *supra* note 41, at 85 & tbl.5.1.

^{138.} The United States tied for seventh place on website quality, although due to ties, a total of 10 countries' websites ranked higher than the United States in terms of quality. *Id.* at 86–87 & tbl. 5.2.

being a] very useful feature [that] helps citizens to find pages on the website without having to guess where information might be found."¹³⁹

Just as the UN survey has compared U.S. government websites to government websites in other countries, some recent research has sought to compare agency websites with commercial ones. In a 2009 article, Forrest Morgeson and Sunil Mithas compared customer service survey results from users of ten federal government websites with survey responses from users of commercial websites. They found that, compared with commercial websites, "e-government Web sites are perceived by their own customers as less customizable, less well organized, less easy to navigate and less reliable."

Taken together, the existing research suggests that the U.S. government's websites rate better when compared to many other countries than they do when compared to business websites. However, the U.S. government may do less well than a good number of other countries in keeping up with some of the latest digital features related to public participation in governmental decisionmaking.

B. Rulemaking and Agency Websites

Existing research has focused on agency websites in general, with an absence of research specifically focused on agency websites in connection with rulemaking. To fill this gap, I co-authored a study, released in July, 2007, that measured website features specifically related to agency rulemaking. Internet to allow the research on e-rulemaking focused on ways to use the Internet to allow the electronic submission of public comments, ranging from the advent of e-mail submission of public comments to the one-stop, government-wide comment funnel, Regulations.gov. Other scholarship at the time tended to play out scenarios by which digital government would "transform" or "revolutionize" the relationship between the public and agency decision makers.

^{139.} *Id.* at 78.

^{140.} Forrest V. Morgeson III & Sunil Mithas, *Does E-Government Measure Up to E-Business? Comparing End User Perceptions of U.S. Federal Government and E-Business Web Sites*, 69 PUB. ADMIN. REV. 740 (2009). The ten agency websites were selected to provide a mix of "agencies delivering benefits, providing services, and performing regulatory functions." *Id.* at 743.

^{141.} Id. at 744.

^{142.} Stuart Shapiro & Cary Coglianese, First Generation E-Rulemaking: An Assessment of Regulatory Agency Websites (Univ. of Pa. Law Sch. Pub. Law & Legal Theory Research Paper Series, Paper No. 07-15, 2007), available at http://papers.ssrn.com/abstract=980247.

^{143.} Balla & Daniels, supra note 18.

^{144.} Beth Simone Noveck, The Electronic Revolution in Rulemaking, 53 EMORY L.J. 433, 433 (2004); Stephen M. Johnson, The Internet Changes Everything: Revolutionizing Public

In that 2007 study, my co-author, Stuart Shapiro, and I proceeded on the premise that any transformation in rulemaking would presumably begin with or at least involve the ubiquitous agency website. We selected eightynine federal regulatory agency websites to study, drawing on all agencies that had completed more than two rules per cycle during the preceding two years. We recruited graduate students to code each agency website according to a uniform protocol we created. The protocol was designed to collect website information in three broad categories: (1) the ease of finding the agency's website, such as by typing in the agency name or acronym directly or using Google; (2) general website features, including the presence of a search engine, a site map, help or feedback options, other languages, and disability friendly features; and (3) the availability and access to regulatory information, such as the kind of information the public could otherwise find in a paper rulemaking docket. Help of the such as the such as the public could otherwise find in a paper rulemaking docket.

Although we learned that agency websites could be easily located, ¹⁴⁷ the general features of agency websites were not as consistently favorable. Search engines were present on the homepages of almost all of the agency websites, and user feedback and help features could be found on a majority of sites, but less than half of the sites were readable in a language other than English and only four of the eighty-nine sites surveyed had what we deemed "disability friendly" features. ¹⁴⁸ More notably, regulatory information was too often lacking. Although more than half of the websites included one or more words related to rulemaking on the homepages (e.g., "rule," "rulemaking," "regulation," or "standard"), other key words related to participation in rulemaking—like "comment," "proposed rule," and "docket"—could not be found on most of the agency homepages.

Strikingly, rulemaking dockets either did not exist online or were not easy to locate. Our study had been conducted before the government-wide adoption of the Federal Docket Management System that underlies Regulations.gov, so online dockets at that time, if they existed, would have been found only on agency websites. Only 44% of the agencies surveyed had a link to some type of docket on their homepage. Dockets were found on the site maps of only three agencies' websites, and the coders could find

Participation and Access to Government Information Through the Internet, 50 ADMIN. L. REV. 277, 320 (1998).

^{145.} Shapiro & Coglianese, *supra* note 142, at 3. We determined the frequency of rulemaking by examining five issues of the semiannual regulatory agenda published in the *Federal Register*.

^{146.} Id. at 3.

^{147.} *Id*.

^{148.} *Id*.

^{149.} *Id.* at 3–4.

^{150.} Id. at 3.

dockets on only two additional sites through the use of the website's search engine. ¹⁵¹ If the coders could find no reference to a docket on an agency's homepage or using a site map and search engine, we asked them to take two minutes to try to locate a docket for that agency by whatever means possible; however, even with this additional instruction and time, they could find only seven more dockets. ¹⁵²

We also compared websites across different agencies. We ranked agencies based on three scores: (1) the ease of finding the website and the general website characteristics; (2) the regulatory content on the website; and (3) the sum of the first and second scores. ¹⁵³ We found that those agencies that promulgated more rules tended to have websites that were slightly easier to find, but they did not tend to have sites with more features. ¹⁵⁴ Remarkably, we found no major difference between the two groups in terms of the accessibility of regulatory information—with the one exception being that it was actually easier to find a link to a docket for agencies that regulated *less* frequently. ¹⁵⁵

We concluded that agency websites had much untapped room for improvement. We urged that greater attention be given to websites as an important mediating juncture between the public and the agency with respect to rulemaking, suggesting that "at the same time scholars and government managers justifiably focus on new tools, some thought also be given to standards or best practices for the accessibility of regulatory information on the first generation tool"—the website. 156

C. Agency Websites and Social Media Today

To assess current agency use of the Internet in support of rulemaking, I undertook to replicate and extend the 2007 study in order to determine whether agencies had made progress in the intervening years and to identify both new developments and any new concerns. This second study, conducted in March 2011, followed the earlier study in its design and in most of the coding protocols, but it also included additional coding for an agency's use of social media, such as Facebook and Twitter, which were not in widespread use at the time data were collected for the earlier study (November 2005).

^{151.} *Id*.

^{152.} *Id*.

^{153.} *Id.* at 5.

^{154.} Id. at 4.

^{155.} *Id.* For 46 agencies from which we could obtain reliable data on their number of employees, we analyzed whether website features varied according to agency size. We found no clear pattern in our results relating to agency size.

^{156.} *Id.* at 6.

As with the earlier study, I drew upon the semiannual regulatory agenda for the sample of agencies to include in the study. Out of about 180 agencies reporting some final rulemaking over the course of the previous two years (2009–2010), a total of ninety were included in the study because they reported an average of two or more rulemakings completed during each six-month period covered by the agenda. Sixteen law students coded the websites on a single day in March 2011, each using a uniform coding protocol and following a collective training session. Each coder separately collected data on two websites—the FCC and the DOT—to enable me to ensure I had a high level of consistency across coders.

1. General Website Characteristics

For the most part, coders again had no difficulty finding the agency webpage. As in the earlier study, Google not surprisingly enabled users to find government agencies easily by name or acronym. In at least two cases—the Rural Utility Service and the Minerals Management Service—coders encountered difficulty because the agencies had been disbanded or their websites merged into other agencies at the time of the coding—even though they had appeared separately in the latest version of the semiannual regulatory agenda. The Minerals Management Service, for example, had been folded into a new entity known as the Bureau of Ocean Energy Management, Regulation and Enforcement following the Gulf Coast oil spill in 2010.

Once at the website, coders started coding at the homepage, checking first for general website features. Of the ninety websites coded:

- Eighty-nine agency websites displayed a search engine
- Seventy-nine websites included some facility to ask a question or provide feedback

^{157.} Some of these "agencies" were actually sub-agencies or offices within cabinet level departments or other larger agencies. In the case of the EPA, the listings in the Regulatory Agenda refer to statutes administered by the agency (e.g., "Clean Air Act"), so effort was made where possible to find the corresponding office (e.g., "Office of Air and Radiation") and code its portion of the EPA website. About ten entries from the regulatory agenda listings that would otherwise have qualified for inclusion were excluded because either they were not really agencies (e.g., "procurement regulation") or were effectively coterminous with agencies already included (e.g., "Department of Homeland Security Office of the Secretary").

^{158.} Intercoder reliability was high (.93). In addition, Stuart Shapiro, one of the coauthors of the 2007 study, duplicated the work of each of the student coders for one agency website each. No notable discrepancies in coding were observed.

^{159.} In such a case, the coders reviewed and recorded data for the new agency website.

- Seventy agency websites included a link to a site index or site map on the homepage
- Twenty-six websites offered what the coders considered a clear disability-friendly feature, such as text equivalents for non-text features (as opposed to a general statement of policy on accessibility to the disabled)

The use of each of these navigational aids increased in the five years since the previous study. However, fewer sites than before included a text-only option (only three out of ninety, as opposed to nine out of eighty-nine in 2005). About the same number of websites (thirty-two out of ninety) provided translations in languages other than English as in 2005, and of these thirty-two sites, seven provided multiple non-English language options.

This time, coders looked for links to various policy statements. Almost every website (eighty-nine of ninety) included a link to a privacy policy, but only thirty-nine included a link to "Open Government," an initiative of the Obama Administration that calls upon agencies to develop plans for improving transparency and public participation. In only twenty-nine instances could coders find an agency policy on the treatment of public comments, such as guidelines about impermissible content (obscenity or profanity, commercial endorsements) or agency policies about the posting of comments.

2. Social Media

Social media—or Web 2.0 features—have definitely secured a foothold use among regulatory agencies, but they remain far from ubiquitous. Of the ninety websites coded:

- Twenty-one contained a link for learning more about the agency's social media presence
- Thirty-two included a listsery subscription for e-mail updates
- Fifty-five provided a general RSS "feed" option, whereas only four provided a feed specifically devoted to rulemaking
- Thirty-one displayed a link to a general blog
 - Fourteen blogs were used for postings by the agency head
 - Only one agency could be found that had a blog specifically devoted to rulemaking
- Thirty-nine websites featured a link to Facebook, but only eighteen of these agency Facebook pages mentioned at least one

word related to rulemaking in a posting (i.e., rule, regulation, rulemaking, standard, law, legislation, or statute)

- Forty-three websites contained a link to Twitter, with only seventeen having a tweet that mentioned at least one of the specified words related to rulemaking
- Forty-three websites included a link to YouTube, a commercial site for posting videos
- Twenty-four linked to Flickr, a commercial site for posting photos
- Fourteen websites included links to other social media applications, including four that linked to MySpace, a less popular version of an online community like Facebook
- Thirty-one websites provided podcasts or online audio recordings
- Fourteen agencies had an option to download a widget (or small software application), although coders failed to find any of these widgets directly relevant to rulemaking
- Seven websites provided an option to receive cell phone updates of some kind

Overall, these findings indicate that a sizeable portion of agencies—but by no means a majority—have started to make use of social media. However, even among those agencies that are using social media, they do not yet use these more interactive, Web 2.0 tools much in connection with their rule-making.

3. Rulemaking Information

Agencies admittedly have many governmental responsibilities besides rulemaking, so their needs for communication on their websites obviously range beyond just rulemaking. Nevertheless, from our 2005 coding of agency websites, Shapiro and I observed "a comparative lack of availability of regulatory information on the agencies' homepages." Despite the fact that the agencies included in our sample engaged in rulemaking, much of the information on their websites had little to do with rulemaking. With the exception of "Freedom of Information Act" and our roster of synonyms for the word "regulation," less than half of the homepages contained the terms we asked our coders to find.

If those results were striking five years ago, it may be even more striking that things have remained quite stable over time. Table 1 compares the results of the 2005 coding with the results of the same coding in 2011. With only relatively minor fluctuations, the frequencies are remarkably alike across the two time periods. Perhaps most striking of all, Regulations.gov continues to appear quite infrequently on agency homepages, having actually declined in appearances since our 2005 coding. This finding is all the more puzzling when one considers that our 2005 coding took place at a time when Regulations.gov was still in its infancy. For whatever reason, federal agencies appear not to have grabbed hold of the Regulations.gov "brand" and made much use of it on their homepages. What they have done instead is use other words to link to Regulations.gov: 53% of the homepages contained a link to a rulemaking-related word (e.g., rules, regulations, etc.) that took the user to Regulations.gov. Agencies apparently do not believe that using the term "Regulations.gov" is itself very helpful in directing users to the Regulations.gov website.

TABLE 1. FREQUENCY OF LINKS FROM AGENCY HOMEPAGES

Word or Phrase	% Agencies with Homepage Link (2005 Coding)	% Agencies with Homepage Link (2011 Coding)	
Code of Federal Regulations	7%	6%	
Federal Register	10%	10%	
Regulations.gov	27%	21%	
Information Quality Act	18%	23%	
Freedom of Information Act	79%	83%	
The words "rule," "rulemaking," "regulation," or "standard"	67%	64%	
The words "law," "legislation," or "standard"	31%	36%	
The word "comment"	15%	26%	
The phrase "Proposed Rules"	15%	23%	
The word "docket"	10%	4%	

Just about as many sites that linked to Regulations.gov linked to some agency-specific page related to rulemaking (54%), with some agencies providing links both to an agency page and to Regulations.gov. When coders used the search engine on the website, in 51% of the cases they found some agency page related to rulemaking in one of the "top ten" search results; however, in only three cases did they find a link to Regulations.gov in one of the top ten search results. Thirty percent of the websites had a central rulemaking page listed on the site map, while only 13% had a link to Regulations.gov on that site map.

In about a third of the agency websites (34%) coders could find a webpage, graphic, or video that explained the rulemaking process to a lay audience. Strikingly, only about a fifth of the homepages (22%) mentioned even one specific proposed rule, and a similar minority of homepages (23%) had a dedicated link or section devoted to proposed rules or rules open for comment. Even more strikingly, about 40% of the websites did not have any link to the *Federal Register*, the *Code of Federal Regulations*, Regulations.gov, any proposed rule, or a section dedicated to rules.

As shown in Table 1, the availability or visibility of agency rulemaking dockets, which was already rather slight in 2005, diminished still further by 2011. Only six agency homepages in 2011 included the word "docket," with only four websites containing a link on that word (a drop from about nine websites in the 2005 study). None of these four links connected the user to Regulations.gov.

Given the scant attention given to dockets on the agencies' homepages, I asked all the coders to see if they could nevertheless find on their own something that looked like a rulemaking docket. About 17% of the time coders could find a central rulemaking docket in one of the top ten results by using the agency website's search engine. In 29% of the websites, coders could find something that looked to them like a docket but that did not use the word "docket."

4. Overall Assessment

Following an approach used in previous analyses of government websites generally, an overall ranking can be made of the agency websites included in this study, based on the number of features and characteristics coded. As with my previous study, separate index scores can be computed for each website based on general characteristics (up to eleven points possible) as well as specific features related to rulemaking (up to twenty-five points). Due to the inclusion of social media in this most recent study, it is also possible to compute a score for visible use of social media (up to thirteen additional points). The presence of each feature or characteristic coded is treated as one point. An overall combined score sums across the three indices, for up to forty-nine points possible, facilitating a comparison across different agency websites in summary fashion.

One caveat should be noted: a higher score does not necessarily mean a website is "better" in some absolute sense, as some of the coded features may not serve all agencies' purposes equally well. Furthermore, we did not include in these rankings other relevant quality factors, such as overall usability or timeliness and accuracy of information. Still, the agencies with the highest fifteen "combined general website and regulatory" scores are listed in Table 2, with agency names shown in bold if that agency also ap-

peared as one of the highest-scoring agencies in the 2005 study. The top-scoring agency in the earlier study—the Food and Drug Administration—came out on top again in 2011. Five additional top-scoring agencies in the previous study also came out as top-scorers in the present analysis. Some agencies that were top scorers in the 2005 study, however, did not place as top scorers in the 2011 study, and some agencies appeared for the first time in the top rankings in the 2011 study. The only agencies that consistently placed in the top were the Food and Drug Administration (FDA), the CFTC, the Alcohol and Tobacco Tax and Trade Bureau, the Occupational Safety and Health Administration (OSHA), the EPA, the Department of Labor, and the Nuclear Regulatory Commission (NRC).

TABLE 2. RANKING OF REGULATORY AGENCY WEBSITES (2011)

Agency	General Website Score (out of 11)	Regulatory Score (out of 25)	Combined General Website & Regulatory Score (out of 36)*	Social Media Score (out of 13)	Total Score (Combined General Website, Regulatory & Social Media Score) (out of 49)
Food and Drug Administration	8	19	27	9	36
Mine Safety and Health Administration	9	17	26	1	27
Securities and Exchange Commission	10	14	24	3	27
Commodity Futures Trading Commission	8	14	22	6	28
Federal Energy and Regulatory Commission	9	13	22	4	26
Occupational Safety and Health Administration	8	12	20	4	24
Nuclear Regulatory Commission	7	13	20	2	22
National Credit Union Administration	8	12	20	3	23
Farm Credit Administration	9	11	20	0	20
Federal Aviation Administration	7	12	19	3	22
Alcohol and Tobacco Tax and Trade Bureau	8	11	19	1	20
Employment and Training Administration	7	12	19	1	20
Environmental Protection Agency	8	11	19	11	30
Department of Agriculture	10	9	19	10	29
Department of Labor	8	11	19	7	26

^{*} This ranking compares best with the 2005 ranking, which did not include a social media score. Note: Agencies listed in bold were also among the highest-scoring agencies in the 2005 study.

The rankings in the present analysis were based on the combined score of the general website and regulatory scores because these scores were used also to compute the rankings from the 2005 coding, which did not take into account social media—a phenomenon still budding at the time. It should be noted, however, that when the social media score is taken into account, the rankings in the present analysis change. The EPA, for example, moves from sixth place to second place, and the Department of Agriculture from sixth place to third place. The FDA still remains in the number one spot.

Of course, no agency came even close to reaching the maximum points possible, which suggests that all agencies continue to have room for further development, especially with respect to the accessibility of information about rulemaking. Even among the overall top-scoring agencies, websites typically achieved no more than half of the possible rulemaking points. If we focus on just those agencies that issued the most rules in 2009–2010 (that is, those above an average of forty final rules), we find that even their websites were missing some fairly simple features that could prove useful in easing public access to and participation in their rulemaking process. For example, only three of these twenty-two agencies (14%) provided a page that displayed all the rules the agency currently had open for comment.

In our previous study, Shapiro and I noticed that among the twenty-one agencies that issued the most rules during that earlier period, only one listed the word "comment" somewhere on its homepage. We found this surprising, because "adding a button or link telling users how to comment on proposed rules must surely be among the easiest possible steps to take to advance the goal of increasing citizen access to and involvement in the regulatory process." In this respect, the results of the latest review of agency websites are somewhat encouraging. In 2011, the websites of seven of the twenty-two agencies that most frequently issued rules contained the word "comment" somewhere on their homepages—actually a considerable improvement over five years. Of course, this still means that nearly 70% of the most frequent rulemaking agencies do not provide on their homepage a link dedicated to the solicitation of public comments. Federal agency websites clearly continue to have opportunities to improve their websites in order to attract and facilitate public comment on proposed rules.

IV. AGENCY PERSPECTIVES ON E-RULEMAKING

To complement the systematic, independent review of agency websites in Part III, I conducted telephone interviews with over fifteen agency managers and staff from ten different agencies, in addition to holding several conversations with officials with responsibilities that cut across agencies. As one of my interview respondents noted, "a one-size-fits-all look at any agency website would be a bit misleading," for as I noted in Part III, a high score does not necessarily mean that an agency's website is "better." Similarly, although *not* scoring high in our index may reveal opportunities for additional features for an agency to consider, it does not necessarily mean that an agency has not been innovative in using electronic media. For example, the DOT did not rank among the top agencies on my index in either the 2005 or the 2011 coding, yet it nevertheless has been a leader in using online dockets and experimenting with online rulemaking chat, such as Regulation Room.

The results from the website rankings, however, did provide a reasonable proxy for identifying variation in agencies in order to decide which agencies to target for purposes of conducting interviews. Since practical constraints limited the number of interviews that could be conducted, I wanted to ensure that respondents came from agencies that reflected more than just the "successes," but also included interviews with officials from agencies with websites that are not as advanced. As a result, four of the agencies included in my interviews ranked in the "top ten" based on the scores in the website review discussed in the previous part of this article, while four placed in the "bottom ten." Two agencies were in between the "top" and the "bottom." Each interview with agency personnel responsible for agency websites or e-rulemakings was conducted on a not-forattribution basis, lasted approximately thirty minutes, and covered a range of questions focused on the experiences these agency personnel reported with their use of the Internet in rulemaking. The interviews revealed a high level of thoughtfulness and depth of experience among the agency personnel who are responsible for building and maintaining government websites. In many agencies, these responsibilities are divided across both information technology offices and communications (or public affairs) offices, with the latter generally responsible for content. In addition to revealing more about the successful deployment of electronic media tools in each agency, the interviews also uncovered several common challenges facing agencies, as well as some opportunities that respondents identified for making the rulemaking process more accessible to those members of the public who use electronic media. I report the findings from these interviews according to ten themes that emerged from many, if not even most or all, of the interviews.

Theme 1: The Value of the Internet

Respondents repeatedly pointed to benefits they perceived from using electronic media to support rulemaking. As one respondent noted, "[i]t used to be we would have people lined up at public reference rooms. Now

we can webcast all open meetings, all of which are viewed from the website and [the online] archive." Another noted that "so much information is available on our website that it leaves us very little that we collect that we don't make publicly available in that way." A third put it simply: "Web services are crucial and worth a real investment in."

Multiple respondents commented on the slowness of getting information released through the "normal" government channels such as the Federal Register. For example, "it takes six to fourteen days to go from the [agency] decision to a Federal Register notice. Twitter gives us a way to let the public know that the Federal Register will be coming out as well as to provide links to webcasts and testimony." Another commented that "by the time a proposed rulemaking is in the Federal Register, our agency's thinking is already well formed." This same respondent continued:

What the agency is doing is not known early enough. Even the regulatory agenda—because it has to be coordinated by OMB and GSA—takes time to put together, so that a rulemaking that has been initiated could be at least two to three months old, and maybe at most four or five months old, by the time it appears in the regulatory agenda. The Internet allows us to put up information faster. Once a regulatory policy officer approves a rulemaking to go forward, we can have something up within a month on our website.

Other respondents similarly noted that they were able to release information to the public—as well as communicate internally—more quickly by posting in a website, blog, or a tweet. In at least one agency, staff members have access to online forms that allow them to upload reports of *ex parte* communications to their agency's website instantaneously. Several respondents also pointed to the advantage of live streaming of public meetings and placing these videos in an online archive for users—a practice that agencies are increasingly employing.

Theme 2: The Complexity of Rulemaking Information

Respondents recognized that the issues their agencies addressed through rulemaking tended to be complex, and that they faced a major challenge in presenting rulemaking information in a manner accessible to a broad segment of the public. "People spend an average of three seconds on a webpage," one respondent reported having been told. "A major challenge for us," he continued, "is taking what is very complicated information and putting it up in a discernible, digestible form that the public can use."

Moreover, the sheer volume of information creates both information management and communication challenges. Any individual rulemaking can generate a lot of information—from lengthy reports to numerous public comments. But of course agencies are sometimes developing several rule-makings at a given time, not to mention pursuing a range of additional activities and objectives. As others have noted, rulemaking in the information age brings with it the problem of information overload. One respondent commented that there is a lot of informational competition out there We've got to get information that's in-house out to people who are interested in it.

The challenge, noted another respondent in commenting on his agency's website, lies in "making the site more intuitive." "It would benefit the public," said another, "if they could go to one place where all the things they could comment on could be found." Another concluded that, at present, "you must be pretty sophisticated to find your way around our website and to connect the dots between the *Federal Register* and Regulations.gov." Much as the old agency docket rooms were more accessible to the repeat players in the rulemaking process who had offices in Washington, D.C., a respondent commented that today's online rulemaking information is still "really for frequent users." Another noted that despite the efforts of agency staff to make "*Federal Register* notices readable and in an accessible format to the general public, they're not really written for the general public."

Theme 3: Effectively Using Electronic Media to Support Rulemaking Is a Management Challenge as Much as a Technology Challenge

As other scholars have noted, the effective deployment of information technology by government agencies demands managerial and political prowess as much as technological skill. One of my respondents put it even more straightforwardly: "Management is critical."

It is not just managing the use of technology, but making sure that the underlying data are accurate and the presentation of information is clear and consistent. If an agency has, as one of my respondent's agencies has, "500,000 webpages and 200 or 300 different people working on the web," then creating a clear, coherent, and integrated website requires a major management undertaking. One respondent pointed out that "we've had [over a decade and a half] of unfettered development and hosting on our website, [so] it's become large and sprawling." Another cautioned that an agency's "website [can't become] a dumping ground for everything you have."

^{162.} Farina et al., *supra* note 9, at 434–40.

^{163.} See, e.g., Jane E. Fountain, Building the Virtual State: Information Technology and Institutional Change (2001).

To respond to the need for good management, many agencies have developed "web councils" or similar agency working groups to manage their websites. They have also developed various internal standards and guidelines for website design. Many are also working to try to develop consistency in design and layout formatting across the sub-units within their agencies: "We work hard at standardizing information across the website," noted one respondent. "A big challenge for us is how to present rules, fact sheets, Q&A in a consistent format, and where to put them on the page," he said. Another respondent noted that "[w]e need to weed through and find the key material and think about how to present that in the most accessible manner possible."

Of course, sometimes management tasks in government can be affected by political considerations. One respondent spoke of a political appointee in an agency deciding to make the default presentation of search results appear in reverse chronological order rather than by relevance, apparently so the top of the results list would show those things accomplished during the administration in which that official served. "That's the kind of thing that happens in the government," the respondent concluded.

Theme 4: Agencies Serve Multiple Audiences

In managing the electronic presentation of regulatory information, agencies confront the particular challenge that their websites serve multiple audiences. "One of the challenges that we face," noted one respondent, "is that we have very different constituencies. If you're a law firm, your ideal website is one thing; but it might be another if you're a small business. It's hard to balance the different needs and design a homepage that will meet them all." Several respondents commented that their websites serve a range of audiences, including reporters, kids doing homework, concerned citizens, students and researchers, the regulated community, Congress, state and local governments, other countries, and librarians. In many agencies, a further audience comprises the agency's own employees who often use the agency's website as much if not more than those outside the agency. As one respondent observed: "So many competing agendas."

Theme 5: Agencies Face Increasing Pressures to Load Information on Their Homepages

Respondents repeatedly reported facing pressures to fill up their agencies' homepages with more content. It's "always a fight for space on the homepage," noted one respondent. "I'm sure everyone in the agency would like to see their business found on the homepage," commented another. Yet, this competition itself creates another management challenge.

"We want to be careful about what we put forward on the homepage," one respondent noted. "If so much content goes on the homepage, it's too much for users to look at." Another respondent lamented the increasing clutter on the homepage, "where there have been boxes and boxes of things We need to minimize the number of fracturing confusions." 164

Theme 6: Agencies Are Attentive to Accessibility for Special Populations

In addition to concerns about making information accessible to the general public, interview respondents noted sensitivity to access issues presented by special populations, such as non-English speakers, visually impaired users, and members of the public who do not have access to high-speed Internet connections. As noted in Part III of this article, some agencies have alternative websites for different languages—or even have automatic translation tools on their websites. However, more than one respondent agreed that "automated translation is worse than no translation at all." These respondents emphasized that when dealing with material that holds legal implications, even minor mistranslations can have potentially significant consequences.

Another respondent reported that, at his agency, "user testing with the blind helps us try to keep improving that aspect, but the agency still has more to do." With respect to the issue of the "digital divide" between users with high- versus low-speed connections, one respondent noted that his agency is "aggressively optimizing images for the web." However, some respondents appeared less concerned about having their agency's site be easily accessible to low-speed users. As one commented, "we have to be careful we might be giving up too much [to accommodate low-speed users]. People on dial-up understand they're on a connection that will take longer."

^{164.} This pressure on agency homepages may be accentuated, rather than ameliorated, by the Obama Administration's plan to freeze temporarily the creation of new government domains and ultimately to reduce the number of existing agency websites. See Macon Phillips, TooManyWebsites.gov, WHITE HOUSE (June 13, 2011), http://www.whitehouse.gov/blog/2011/06/13/toomanywebsitesgov (statement by White House Director of Digital Strategy on freeze on the creation of new government domains and plans to eliminate "unnecessary and duplicate websites"); .gov Reform Effort: Improving Federal Websites, USA.GOV, http://www.usa.gov/WebReform.shtml (last visited July 17, 2011) (website dedicated to Obama Administration effort to reform government websites). The former Federal Chief Information Officer, Vivek Kundra, believes "game changing technologies," including improved search capacity, will be needed to avoid increasing the complexity of existing websites. Kasie Coccaro, What You Missed: Live Chat on Improving Federal Websites, WHITE HOUSE (July 13, 2011), http://www.whitehouse.gov/blog/2011/07/13/what-you-missed-live-chat-improving-federal-websites.

Theme 7: Managing the Accumulation of Information Is an Emerging Concern

Although not a dominant theme across all respondents, another issue that arose during the interviews centered on what to do with old material. Many agencies have documents dating back for decades that are now available on their websites. Users who search for documents on those websites will often retrieve a plethora of documents, old and new. For many users, the search results are confusing, noted one respondent. Agency managers will increasingly need to consider how to provide more optimal retrieval and display techniques so that users are better able to find the materials that they are looking for—presumably on current rulemakings—even at the same time that older material remains available in online archives.

Theme 8: Agencies Are Still Learning How to Use Social Media

Agencies' social media practices are still emergent. Although many of our respondents seemed to support greater use of social media tools, even those who did support it suggested that such support was not uniformly shared across their agencies. "What social media is more for is the Secretary to talk about the latest speeches and public events," according to one view. "Social media is a 'feel-good' thing," said a respondent. Another respondent noted that "some people don't want Facebook pages . . . [as they] can be a time sink."

I heard palpable concerns about the resource intensity of social media. As one respondent remarked, "the challenge is appropriate staffing resources. Do you have people with the time?" Moderating comments on Facebook can be "a very time-consuming process" and some agencies "do not have the capability in place." Agency staff members find they need to monitor Facebook, Twitter, and blogs in part to screen out comments from users that contain profanity, product endorsements, gratuitous political expressions, and obscenities. A number of agencies have developed guidelines on comments which make it clear that it is okay to disagree with and criticize the agency in online comments, but that, in the words of one respondent, "it's not appropriate to open up flame war or troll."

A more fundamental challenge with social media "is the level of expectations" about responsiveness, observed one respondent, who continued:

People are posting, waiting five minutes, and wanting to see your response. But it might take us a couple of days to get a response approved. We sometimes let people know we've heard them and will get back to them. People at least appreciate that we're working on it.

As another agency respondent stated, "The key with the new media is the need to respond." Yet, as another noted, a "lack of responsiveness is a problem with government in general. But we are making progress, doing the best we can."

Part of the explanation for agencies' sluggishness appears to be the desire to provide accurate and authoritative responses, which requires internal review and at times even consultation with high-level officials. As one respondent in a public affairs office commented, "this is the government and we're a regulatory body, so it's not smart of us to post without clearing it first through the persons who know the most up-to-date information." Another respondent reported that her agency schedules contributions on the agency blog three months in advance, just to be able to post entries three times per week.

For now, the interviews suggest that agencies are using social media primarily as an outlet for information dissemination from the agency to the public, rather than as a vehicle for interactive dialogue between agency officials and members of the public. As one respondent observed, "first you use Facebook or blogs as a place to re-purpose announcements and press releases." Only at some later point will be it be possible to "make current the Facebook entries and experiences."

Theme 9: Ongoing Evaluation Is Crucial for Making Continuous Improvement

A number of respondents' agencies had either recently completed a website redesign or were planning to undergo a redesign in the near future, so they spoke of efforts to collect user data to support and evaluate such redesign efforts. One respondent noted that it is important to have flexibility with a website so as to be able to highlight current topical issues or proceedings as needed. Another respondent reported that "we're using media at the end of each rulemaking to help us redesign the webpage to get more information out." In some agencies, it is apparent that managers and technology developers are making deliberate efforts to solicit input and assess how well specific uses of electronic media are serving agency objectives.

Theme 10: Effective Use of Electronic Media Requires Adequate Resources

Perhaps not surprisingly, a common issue that arose in interviews was the need for resources. We have no budget," stated one respondent at a

^{165.} In a recent survey of over 200 federal managers, cost concerns ranked as the most significant barrier to improved public outreach. Gov't Bus. Council, *Engaging Citizens: Federal Agency Efforts to Connect with the Public*, GOV'T EXECUTIVE (June 2011),

smaller agency. For that respondent's agency, for example, "an RSS feed has been highly sought after by our big users, and even our agency's own employees, but we don't have the money to develop or install it." Other respondents noted the staffing needs associated with using social media and following the comments on tools such as Facebook. Another noted that even with the idea of making comments available on the agency website, we are "without sufficient staff to review up front and screen each comment."

V. RECOMMENDATIONS

The interview responses in Part IV reveal that agency officials have been able to overcome a range of management challenges associated with using electronic media. The "best practices" discussed in Part II of this article, along with the website improvements and uses of social media discussed in Part III, also demonstrate that the challenges associated with managing agencies' use of the Internet and social media do not prevent all progress. The growth in internal agency standards, Web councils, and crosscutting government practice guides all speak to the amount of time and thoughtful effort that agency officials now devote to maintaining and improving the usability and accessibility of electronic media. Efforts such as the EPA's Reg DaRRT testify to the potential for promising innovations to emerge from within agencies, notwithstanding the centralization of the Federal Docket Management System and Regulations.gov.

Still, the comparison of agency websites in Part III and the interview responses in Part IV also reveal opportunities for further progress. Agencies today confront a dramatically denser and more complicated informational environment, with a proliferation of demands for content to appear on agency homepages as well as a still untapped potential for more effective use of social media. Although the accessibility of rulemaking information is light-years ahead of where it was only two decades ago, agencies still have plenty of room for further improvement. As former OIRA Administrator Sunstein has observed, "regulatory information online is unnecessarily difficult to navigate, and members of the public may have difficulty searching, sorting, finding, or viewing documents at each stage of the process." 167

http://www.govexec.com/gbc/engaging-citizens-connect-public/41036/ ("A total of 74 percent of federal managers identify limited budget as their central challenge.").

^{166.} After reviewing agency websites in March for this study, both Stuart Shapiro and I concurred that agency homepages are today packed with markedly more information than they were in November 2005, the last time we coded agency websites.

^{167.} Memorandum from Cass R. Sunstein, Adm'r, Office of Info. & Reg. Affairs, on Increasing Openness in the Rulemaking Process—Use of the Regulation Identifier Number

In Part III of this article, results of a study of agency websites showed that there remains considerable variability in how well different agencies are managing their use of electronic media. Innovations that some agencies have adopted merit adoption by other agencies. To continue to improve e-rulemaking, agency decision makers should ultimately take action consistent with the following seven recommendations.

Recommendation 1. Administrative Agencies Should Manage Their Use of the Internet with Rulemaking Participation by the General Public in Mind

Agencies use the Internet for many different purposes, communicating through their websites valuable information to the public not only about rulemaking, but also about a variety of other issues and activities. The proliferation of competing demands for communication makes rulemaking only one—and to some managers within agencies, a relatively minor one of the many priorities under consideration when agency officials make decisions about the design and functionality of their websites. As a result, the risk exists that agencies will make website design decisions without giving due consideration to the values of public participation reflected in the various laws and executive orders that have called upon agencies to use electronic media to enhance the public's understanding of and role in rulemaking. 168 Indeed, an emerging approach to government website design focuses on giving prominence to "top tasks" sought by members of the public.¹⁶⁹ Such an approach certainly has much to be said for it. But an exclusive focus on current website use or demand will probably push information about rulemaking, and online opportunities for public commenting on rulemaking, far into the background, simply because the volume of website traffic generated by online government services performed by many agencies dwarfs the traffic related to rulemaking. Rulemaking may perhaps never be a "top task" in terms of the numbers of web users, but in a democracy few tasks compare in significance with the ability of government agencies to create binding law backed up with the threat of civil, and even criminal, penalties.

For this reason, officials who make decisions about the design of and content on their agencies' websites should ensure that rulemaking information will be easily accessible to ordinary individuals—not just displayed in a way that comports with current traffic or usage patterns. Consider, as an example, the FCC's website. The FCC's website recently received a

⁽RIN), to the President's Mgmt. Council (Apr. 7, 2010), available at http://www.whitehouse.gov/sites/default/files/omb/assets/inforeg/IncreasingOpenness_04072010.pdf.

^{168.} See supra Part I.

^{169.} See Coccaro, supra note 164 (statement by Sheila Campbell, Director of the General Services Administration's Center for Excellence in Digital Government).

major redesign, making it perhaps the most up-to-date website design of any federal agency, with many appropriate and useful improvements made after extensive public input.¹⁷⁰ Nevertheless, from the standpoint of making rulemaking information accessible to ordinary citizens, it is striking that the website is not as clear and accessible as the agency's former site. The new site does not list "rulemaking" or "regulation" prominently on the homepage.¹⁷¹ Instead, the new site includes a tab for "rulemaking" as one pull-down option under the heading "Business and Licensing."¹⁷²

Now, when a typical citizen goes to the FCC website seeking to find out about FCC's policy work, she might be forgiven for not looking under a tab labeled "Business and Licensing." She might instead be expected first to click on the tab for "Our Work"—but she will not see there any option for rulemaking. Only if she clicks further under "Our Work," on a pull-down labeled "Consumers," and then goes to another webpage, will she find a section toward the bottom for rulemaking. There she will find—under a heading obliquely called "Related Content for Consumers"—an incomplete list of the agency's proposed rules. 173 Alternatively, if she clicks the "Take Action"174 button on the homepage and then further chooses the pull-down menu item for filing a public comment, she will find a list of the Commission's "Most Active Proceedings" (Figure 7)—although some of these proceedings appear to be largely if not fully completed, such as a listing for the FCC's National Broadband Plan. 176 Other entries under the "Most Active Proceedings" contain no description whatsoever, which will make it hard for ordinary citizens to use. For example, a listing for the AT&T/T-Mobile merger—while perhaps self-explanatory at a certain level—offered no summary or other information about the proceeding, such as deadlines, standards for agency decisions, or links to any other supporting materials. 174

^{170.} FED. COMM. COMMISSION, http://www.fcc.gov (last visited July 14, 2011).

^{171.} *Id.* A link for "Rulemaking" does appear in tiny font at the bottom of the site under the heading "Business and Licensing."

^{172.} *Id.*

^{173.} For example, on a day when 15 rulemakings dating back to December 29, 2010, appeared under "Related Content for Consumers," a total of 59 proposed rules could be found for the same period via a search for FCC proposed rules on Regulations.gov. Compare Related Content for Consumers, FED. COMM. COMMISSION, http://www.fcc.gov/related/44?categories[0]=proceeding (last visited July 14, 2011), with Search Results, REGULATIONS.GOV, http://www.regulations.gov/#!searchResults;a=FCC;dct=PR;pd=12|29|10-07|14|11;rpp=10; so=DESC;sb=postedDate;po=0 (last visited July 14, 2011).

^{174.} FED. COMM. COMMISSION, supra note 170.

^{175.} Send Us Your Comments, FED. COMM. COMMISSION, http://www.fcc.gov/comments (last visited June 9, 2011).

^{176.} A National Broadband Plan for Our Future, FED. COMM. COMMISSION, http://www.fcc.gov/rulemaking/09-51-0 (last visited June 9, 2011).

^{177.} In fact, the link for "AT&T/T-Mobile" takes users directly to a form for filing a comment, which provides no further information about the merger. ECFS Express Upload

The user presumably could not even glean from the website that the AT&T/T-Mobile proceeding is not a rulemaking, to the extent that matters. Of course, it *is* possible to go to the search page for all FCC proceedings, ¹⁷⁸ type in the proceeding number for the AT&T/T-Mobile merger, and find relevant FCC notices and documents. But surely it would also be helpful for members of the public to see a summary or more descriptive account of the proceeding at the outset—especially when the proceeding appears on a list designed to attract attention to it and when that same kind of summary information can already be found elsewhere in the system.

FIGURE 7: FEDERAL COMMUNICATIONS COMMISSION'S LISTING OF MOST ACTIVE PROCEEDINGS



Source: http://www.fcc.gov/comments (last visited June 10, 2011)

The point here is not to single out the FCC or its website for criticism. To the agency's credit, its website provides a prominent access point for comments, it lists some of the more significant proceedings, and for some of these it includes precisely the kind of summaries helpful to a layperson.¹⁷⁹ Other agencies do not provide even nearly the same level of accessibility—and that *is* the point. If even on what could be considered a

Form, FED. COMM. COMMISSION, http://fjallfoss.fcc.gov/ecfs/upload/display;jsessionid=NwPQnfwQY1f6zy4kJmjj02M3KhmJwFTn06G3QYWhTyHl6ky946qD!271039122!206283283?z=mko6v (last visited June 9, 2011).

^{178.} Search for Proceedings, FED. COMM. COMMISSION, http://fjallfoss.fcc.gov/ecfs/proceeding_search/input?z=gr9c5 (last visited June 9, 2011).

^{179.} See, e.g., A National Broadband Plan, supra note 177.

state-of-the-art agency website it can be cumbersome for ordinary citizens to find rulemaking information, then presumably more work remains across the entire federal government.

Web designers have an understandable, if not even desirable, tendency to create sites that meet the needs of their primary users. This is perfectly sensible in most contexts. In the context of government agencies making binding laws, however, a commitment to well-accepted democratic principles should lead agency web designers to create sites that are at least neutral across user types, if not even more accessible to less sophisticated or one-shot participants in the rulemaking process. Placing a primary link to rulemaking information under a tab labeled "business"—to use the FCC again as an illustration—may well reflect the reality that businesses are both the most frequent users of agency websites and commenters on agency rulemaking. But such thinking does not fit with the ideal of making the rulemaking process as accessible to ordinary citizens as it is to sophisticated repeat players.

Recommendation 2. Agencies Should Provide a One-Stop Location on Their Homepages for All Rulemakings Currently Open for Comment

One way for agencies to improve their ability to help members of the public learn about and comment on an agency rulemaking would be to create webpages, linked on their homepage, that list all of the rules the agency is developing and all of those currently open for comment. Anyone interested in an agency rulemaking can reasonably be expected to go first to the agency's website to find information about the rulemaking, as well as to learn about how to provide the agency with input about that rulemaking. Yet few agency websites currently list all rules open for comment.

One agency that provides a page of rules open for comment, the CFTC, allows users to access readily a list of all of the proposed rules the agency has initiated under the Dodd-Frank Act (Figure 8). In fact, the agency's homepage prominently features, as the first frame highlighted on the top of the page, the headline "CFTC Proposes Dodd-Frank Rules," clearly inviting the user to click a button to view all of the proposed rules under the Dodd-Frank Act. Clicking the button takes the user to a full

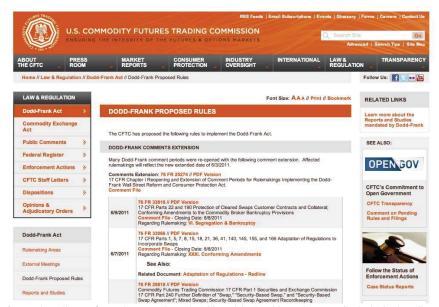
^{180.} For data on the frequency of business participation in rulemaking, see, e.g., Cary Coglianese, *Litigating within Relationships: Disputes and Disturbance in the Regulatory Process*, 30 L. & Soc'y. Rev. 735 (1996).

^{181.} Dodd-Frank Proposed Rules, U.S. COMMODITY FUTURES TRADING COMMISSION, http://cftc.gov/LawRegulation/DoddFrankAct/Dodd-FrankProposedRules/index.htm (last visited June 9, 2011).

^{182.} U.S. COMMODITY FUTURES TRADING COMMISSION, http://cftc.gov (last visited June 9, 2011).

list of all of the proposed rulemakings that CFTC is currently working on, even if the comment period has already closed, in which case the date of the closing is noted on the list. ¹⁸³ It does take some work for the user to look down the full list to find out which rules are still open for comment; a clearer display might list separately those rules currently open for comment. ¹⁸⁴

FIGURE 8: U.S. COMMODITY FUTURES TRADING COMMISSION'S DODD-FRANK ACT PROPOSED RULES



Source: http://www.cftc.gov/LawRegulation/DoddFrankAct/Dodd-FrankProposedRules/index.htm~(last visited June 10, 2011)

The EPA's website has a similar vehicle for finding rules currently in the making, although it is not at all as prominently displayed nor as easily found on the EPA's website as the comparable page is on the CFTC site. To find EPA's page, the user must click "Laws & Regulations" on the homepage, ¹⁸⁵ scroll down to a menu option for "Regulations," and then find an entry under the heading "Track EPA Rulemakings and Retrospective Reviews," which then takes the user to a link to the agency's Reg DaRRT website. ¹⁸⁶ Up at the top right corner of the homepage, the user sees links

^{183.} Dodd-Frank Proposed Rules, supra note 182.

^{184.} If they look carefully enough, users will see, of course, that they can sort entries so that the entries can be viewed by the deadline for comments.

^{185.} U.S. Envtl. Protection Agency, http://www.epa.gov (last visited Oct. 14, 2011).

^{186.} Reg DaRRT, supra note 47; see also supra Figures 2 & 3 and notes 47-53 and accompanying text.

under the banner, "Top Tasks." On the previous version of Reg DaRRT, known as the EPA's Rulemaking Gateway, among these top tasks was a link specifically designated as "Comment on a Regulation," which took the user to a list of all agency rules that were currently open for comment. Reg DaRRT, however, no longer treats commenting on a regulation as a "top task," nor does it provide a list of all agency rules open for comment. Instead, Reg DaRRT simply gives the user a hyperlink to Regulations.gov, along with a set of instructions on a further multistep process of using Regulations.gov to find EPA rules open for comment. EPA's Rulemaking Gateway also previously displayed in a prominent location on its frontpage a list of EPA's "Most Viewed Rulemakings," a feature which has now also been removed.

Notwithstanding their limitations, the CFTC and EPA websites are steps in the right direction of providing easy access to information needed to facilitate public comment on rulemaking. Notably, each agency has done so by creating its own separate database of rules in the making and developing its own display function for these lists. To implement a rulemaking webpage for each agency, a more cost-effective approach for the federal government would be to model agency rulemaking webpages off of a concept used by many members of Congress to display legislation they are currently sponsoring. These members provide a link on their homepage pointing users to a page that lists all the legislation they sponsor. 192 The user who clicks the button for sponsored legislation is shown a display that contains a list of sponsored bills-not drawn from the member's own database, but rather a list extracted from the THOMAS database of all legislation currently pending in Congress. 193 At the click of the button, the computer executes what is essentially a "canned" or predetermined search and extracts from the database underlying THOMAS only those bills that are sponsored or cosponsored by that Member of Congress. 194 Figure 9 provides an example from a House Committee's website, but legislators also have similar pages on their individual websites.

^{187.} Reg DaRRT, supra note 47.

^{188.} Rulemaking Gateway, U.S. ENVTL. PROTECTION AGENCY, http://yosemite.epa.gov/opei/RuleGate.nsf/ (last visited June 9, 2011) (prior version of website no longer available).

^{189.} Comment on a Regulation, U.S. ENVTL. PROTECTION AGENCY, http://yosemite.epa.gov/opei/RuleGate.nsf/content/phasescomments.html?opendocument (last visited June 9, 2011) (prior version of website no longer available).

^{190.} Reg DaRRT, supra note 47.

^{191.} Comment on a Regulation, supra note 50.

^{192.} See, e.g., Sponsored Legislation, CHARLIE DENT, U.S. REPRESENTATIVE FOR 15TH DISTRICT PA., http://dent.house.gov/index.cfm?p=SponsoredLegislation (last visited June 9, 2011).

^{193.} *Id*.

^{194.} *Id*.

FIGURE 9: DISPLAY OF CURRENT LEGISLATION (FROM THOMAS)
ON HOUSE COMMITTEE WEBSITE



Source: http://www.smallbusiness.house.gov/Legislation/ (last visited May 20, 2011)

Administrative agencies would avoid duplication of effort if they followed this model by providing a link on their homepage to all rules currently open for comment. A list of these rules already exists via the Federal Docket Management System and Regulations.gov. Users can, in fact, currently get this information by going to Regulations.gov, ¹⁹⁵ but even there they must conduct an advanced search which will likely prove cumbersome to most visitors. ¹⁹⁶ What they retrieve from this search ultimately can be a list of rules by an individual agency that are currently open for comment. Since these data are already available in the Federal Docket Management System, the federal government could develop an extraction code similar to that used on members of Congress's websites, completely

^{195.} REGULATIONS.GOV, http://www.regulations.gov (last visited June 9, 2011).

^{196.} Advanced Search, REGULATIONS.GOV, http://www.regulations.gov/#!advancedSearch (last visited June 9, 2011).

automating retrieval and making it unnecessary for each individual agency to create its own databases, as the CFTC and the EPA have undertaken.

More generally, the interoperability of websites across the federal government that relate to rulemaking—such as Regulations.gov, RegInfo.gov, Federal Register 2.0, and so forth—can also avoid unnecessary duplication. Each of these websites contains rulemaking data, some the same, some different. Greater efficiencies would come about by allowing greater sharing between these sites and their underlying data systems. ¹⁹⁷ By creating linkages across these websites and integrating data, users could seamlessly retrieve all the information the federal government has about rulemaking found across each of these sites. At present, a user who finds a proposed rule listed in Federal Register 2.0 finds only a general link to Regulations.gov. Not only is that link hidden within a section of the text of the agency's Federal Register notice, but it only points the user to the Regulations.gov homepage, not to the docket for the specific rulemaking. A more integrated approach would provide the user who finds a specific proposed rule at Federal Register 2.0 with a prominent link that, upon clicking, would automatically extract from the Federal Docket Management System and any other relevant data systems all the supporting documents, public comments, and other information currently housed in the several relevant government databases but only available through separate, cumbersome searches at sites such as Regulations.gov or RegInfo.gov. Users who find a rulemaking at any of these sites, or at Federal Register 2.0, should be able to retrieve automatically the relevant information from the other data systems. Following a recommendation offered in a 2008 report by an American Bar Association-sponsored Committee on the Status and Future of e-Rulemaking, over the longer term the federal government could even

Of course, it is essential that the underlying data in the shared systems be accurate, complete, and up to date. See Cary Coglianese, Stuart Shapiro, and Steven J. Balla, Unifying Rulemaking Information: Recommendations for the New Federal Docket Management System, 57 ADMIN. L. REV. 621, 638 (2005) ("Electronic dockets['] . . . impact will depend on having information in these dockets that is useful, complete, consistent, and easy to find."); COPELAND, supra note 27, at 39-40 (discussing concerns about consistency and accuracy of the data inputted into the Federal Docket Management System); Memorandum from Cass R. Sunstein, Adm'r, Office of Info. & Reg. Affairs, on Increasing Openness in the Rulemaking Process-Improving Electronic Dockets, to the President's Mgmt. Council (May 28, 2010), available at http://www.whitehouse.gov/sites/default/files/omb/assets/inforeg/edocket_ final_5-28-2010.pdf (addressing inconsistencies and incompleteness to data submitted by agencies to the Federal Docket Management System). For some initial responses to concerns about e-rulemaking data quality, see Improving Rulemakings through Best Practices, REGULATIONS.GOV EXCHANGE, http://www.regulations.gov/exchange/topic/exchange/best practices (last visited July 17, 2011); eRulemaking Program, Improving Electronic Dockets on Regulations.gov and the Federal Docket Management System: Best Practices for Federal Agencies, REGULATIONS.GOV EXCHANGE (Nov. 30, 2010), http://www.regulations.gov/exchange/sites/ default/files/doc_files/20101130_eRule_Best_Practices_Document_rev.pdf.

"anticipate eventual interoperation with relevant federal systems such as THOMAS (statutory and other legislative material) and PACER (judicial material from the federal courts), as well as relevant regulatory material," so as to provide maximal accessibility to all the information connected with a rulemaking. 198

Recommendation 3. Agencies Should Consider, in Appropriate Rulemakings, Retaining Facilitator Services to Manage Discussion with Respect to These Rulemakings on Social Media Sites

Although websites allow agencies to communicate to the public about what they are doing, and although websites also allow the public to submit comments to agencies, the online experience at present is hardly akin to a give-and-take dialogue. Social media tools, such as Facebook, provide new vehicles for interactive discussion between agency officials and the public. However, many agencies are not currently exploiting social media's interactive, dialogic potential. As noted in Part IV, agency officials find that they are unable to provide the staff time needed to engage in deliberation via Facebook. Furthermore, some agency leaders appear to doubt the wisdom of engaging in such a dialogue, given that agency staff may make comments that have not been fully considered or that perhaps could be inaccurate or later viewed as prejudicial in some manner to the agency.

How then to use social media effectively? Agencies could consider retaining services of facilitators, whether they are designated agency employees or independent contractors. The purpose of the online facilitator would be to do just that—facilitate an online conversation about a rulemaking. The facilitator would not speak on behalf of the agency—and a disclaimer to this effect could be stipulated clearly and prominently. Indeed, for this reason it may be that an independent contractor would be more appropriate as a facilitator. Although the facilitator would not be speaking on behalf of the agency, the facilitator's objective would be to steer the conversation in a fashion that could be more helpful to the agency's decision makers. This could mean that agency managers would stay in contact with the facilitator, perhaps conveying their desire to follow up on a particular line of comments or perhaps to raise questions that would be helpful if they were answered by participants in the online conversation. Facilitators could pose questions, float ideas, and even offer their own explanations for particular features, issues, or decisions implicated in rulemaking proceedings—but all without binding or prejudicing agencies.

FIGURE 10: REGULATION ROOM'S MANAGEMENT OF ONLINE DIALOGUE



Source: http://regulationroom.org/eobr/what-about-privacy-concerns/#1 (last visited June 10, 2011)

This proposed recommendation is not unprecedented. Agencies hire facilitators of negotiated rulemaking committees and of public meetings, and on occasion they have even assigned individual "conversation-starters" to early efforts at online dialogues. ¹⁹⁹ Cornell's Regulation Room uses online moderators—and of course it also preselects, and to a certain extent directs, the list of topics that participants in Regulation Room are encouraged to discuss (Figure 10). ²⁰⁰ A designated facilitator when agencies use social media could "direct traffic" in real time.

Recommendation 4. Agencies Should Strive Further to Improve the Accessibility of Their Websites to All Members of the Public

As my interviews confirmed, agency officials already try hard to make their websites accessible to the public, notwithstanding the complexity and cascading accumulation of regulatory information. Despite these efforts, it remains the case that in the U.S., as in other developed countries, "many elderly people, low-income individuals and families, and minorities are

^{199.} An example of the latter use can be found in EPA's online dialogue on public participation. See Beierle, supra note 21, at 12–13.

^{200.} Learn More, REG. ROOM, http://regulationroom.org/learn-more/ (last visited June 9, 2011).

outside the realm of the digital society."²⁰¹ For these and other types of users who encounter distinctive challenges in accessing information online and participating in rulemaking, agencies should strive to improve on the accessibility of their use of electronic media.

1. Non-English Access

Nearly 20% of the population in the United States speaks a language other than English at home. ²⁰² In 2000, President Clinton issued Executive Order 13,166 in an effort "to improve access to . . . programs and activities for persons who, as a result of national origin, are limited in their English proficiency." For those individuals with limited proficiency in English, websites need alternative languages if they are to be accessible. In guidance on the Executive Order, the Department of Justice (DOJ) has noted that as a general matter "entire websites need not be translated;" however, the DOJ has made clear that "vital information" does need to be translated. ²⁰⁴ The OMB's policy on agency websites reminds agencies that they are "required to provide appropriate access for people with limited English proficiency."

Given the proportion of the public with limited English proficiency and the government's policies requiring accessibility, it is striking that, as noted in Part III, only about 36% of all agency websites include on their homepage a link to a language option other than English—for even some of their websites' content. Among the agencies that regulate most frequently, the availability of non-English language materials is better (62%), but still more than one third of the most active regulatory agencies' homepages provide no readily retrievable information in any language other than English.

Short of creating separate websites in other languages, agencies could include a link on their sites to automated translator tools, such as one avail-

^{201.} U.N. DEP'T OF ECON. & SOC. AFFAIRS, supra note 41, at 89.

^{202.} Hyon B. Shin & Robert A. Kominski, *Language Use in the United States: 2007*, U.S. CENSUS BUREAU, 2 tbl.1 (Apr. 2010), http://www.census.gov/prod/2010pubs/acs-12.pdf.

^{203.} Exec. Order No. 13,166, 65 Fed. Reg. 50,121, 50,121 (Aug. 11, 2000). This executive order has been affirmed by the Obama Administration. See Memorandum from Eric Holder, Att'y Gen., on the Federal Government's Renewed Commitment to Language Access Obligations Under Executive Order 13166, to Heads of Fed. Agencies, Gen. Counsels & Civil Rights Heads (Feb. 17, 2011), available at http://www.justice.gov/crt/about/cor/AG_021711_EO_13166_Memo_to_Agencies_with_Supplement.pdf. A dedicated website—LEP.gov—is devoted to the implementation of the Executive Order. LIMITED ENG. PROFICIENCY (LEP): FED. INTERAGENCY WEBSITE, http://www.lep.gov/index.htm (last visited July 17, 2011).

^{204.} Commonly Asked Questions & Answers Regarding Executive Order 13166, U.S. DEP'T JUST., http://www.justice.gov/crt/about/cor/Pubs/lepqa.php (last visited July 17, 2011).

^{205.} Memorandum from Clay Johnson III, Deputy Dir. for Mgmt., Office of Mgmt. & Budget, on Policies for Federal Agency Public Websites, to the Heads of Exec. Dep'ts & Agencies (Dec. 17, 2004), available at http://www.whitehouse.gov/sites/default/files/omb/memoranda/fy2005/m05-04.pdf.

able through Google Translate. The federal government's current "best practice" guidelines for websites, however, advise agencies against linking to or relying on translator tools. 206 Accordingly, relatively few agency websites provide such automated translator tools. The Small Business Administration is one exception, as its homepage includes a button with a link that allows users to take advantage of the Google translation tool to translate its site into dozens of different languages. Our interview respondents were often worried about the inaccuracies that would emerge in a translation performed automatically, even by something like Google Translate. This is not an unreasonable concern, particularly for documents that may have compliance and enforcement implications, as rules do. As one prominent federal webpage on site design has noted, "[n]o machine can fully replace a human being for the interpretation of different and subtle meanings of a word within different contexts."

However, even without relying on automatic translators, it is possible for agencies to provide some middle ground between no translation and full translation. In accord with DOJ's interpretation of Executive Order 13,166, 209 agencies can follow a model illustrated well by EPA's website (Figure 11). The EPA provides a scaled-down webpage translated into several different languages, including Spanish, 210 Chinese, 211 Vietnamese, and Korean. 213 These pages contain distinct text—that is, not complete translations of EPA's entire website—in order to reach out to and help inform members of the public who do not speak English as their primary language. More agencies should provide such pages.

^{206.} Top 10 Best Practices for Multilingual Websites, HOWTO.GOV, http://www.usa.gov/webcontent/multilingual/best-practices.shtml (last visited June 7, 2011) ("The use of machine or automatic translations is strongly discouraged even if a disclaimer is added."); see also Laura Godfrey, Automated Translation—Good Solution or Not?, HOWTO.GOV, http://www.usa.gov/webcontent/multilingual/automated-translation.shtml (last visited June 7, 2011) ("Some government websites are currently using Google Translate. This is not a best practice and should not be used as a sole solution A disclaimer on translated content . . . does not work for the [user] trying to accomplish a task."). The HowTo.gov website is maintained by the General Service Administration's (GSA) Office of Citizen Services and Innovative Technologies and the Federal Web Managers Council.

^{207.} SMALL BUS. ADMIN., http://www.sba.gov (last visited June 9, 2011).

^{208.} Godfrey, supra note 206.

^{209.} U.S. DEP'T JUST., supra note 204 & accompanying text.

^{210.} Spanish Webpage, U.S. ENVTL. PROTECTION AGENCY, http://www.epa.gov/espanol/(last visited June 9, 2011).

^{211.} Chinese Webpage, U.S. ENVTL. PROTECTION AGENCY, http://www.epa.gov/chinese/simple/ (last visited June 9, 2011).

^{212.} Vietnamese Webpage, U.S. ENVTL. PROTECTION AGENCY, http://www.epa.gov/vietnamese/ (last visited June 9, 2011).

^{213.} Korean Webpage, U.S. ENVTL. PROTECTION AGENCY, http://www.epa.gov/korean/(last visited June 9, 2011).

AGENCIA DE PROTECCIÓN AMBIENTAL DE ESTADOS UNIDOS Contactenos Búsqueda: O Toda EPA @ Esta Área Büsgueda avanzada Temas de la A a la Z Aumento de texto: A A A A Inglés Usted está aquí: EPA Home » EPA en español Siete prioridades para EPA Salud y hoga El tomar acción sobre el cambio climático El mejorar la calidad del aire El asegurar la seguridad de las sustancias quimicas La limpieza de nuestras comunidades sejos y guias Desastres naturales y El proteger las aguas estadounidenses El expandir la conversación sobre el emergencia climáticos ambientalismo y trabajar para la justicia El desarrollar fuertes consorcios con estados y maestros Lea el memorándum de la administradora Lisa P. Jackson

FIGURE 11: U.S. ENVTL. PROT. AGENCY WEBSITE IN SPANISH

Source: http://www.epa.gov/espanol/ (last visited July 17, 2011)

Another middle-ground option is for agencies to provide translations for specific rulemakings that can be anticipated to have disproportionate effects upon or elicit a substantial interest by individuals with limited English proficiency. The FTC, for example, provided just such a translation of an announcement it made of an antitrust cooperation agreement between the United States and Chile. Consistent with guidelines from both the DOJ and the GSA, agencies should provide translations in all rulemakings that can be anticipated to affect distinctively, or be of particular interest to, non-English speaking populations.

2. Low-Bandwidth Access

Even with advances in information technology, "the 'public' that participates in the rulemaking process is still a very narrow slice of the entire citizenry." Except in the most unusual circumstances, agency rules elicit

^{214.} La Comisión Federal de Comercio y el Departamento de Justicia Firman un Acuerdo de Cooperación para la Defensa de la Competencia de Chile, FED. TRADE COMMISSION (Mar. 31, 2011), http://www.ftc.gov/opa/2011/03/chileagree_sp.shtm.

^{215.} See U.S. DEP'T JUST., supra note 204; Multilingual Websites, HowTo.Gov, http://www.usa.gov/webcontent/multilingual/ (last visited June 7, 2011).

^{216.} Cary Coglianese, *The Internet and Citizen Participation in Rulemaking*, 1 I/S: J.L. & POL'Y FOR INFO. SOC'Y 33, 38 (2005); *see also id.* at 39 (noting that "survey data suggest that, as a generous upper bound, certainly no more than 3% of adults file comments on

more comments from businesses and other organizations than from ordinary individuals. This participatory divide—between those who have the ability, time, or inclination to participate in the rulemaking process and those who do not—combines with another very real and broad divide over general access to the Internet. Around the world, "[o]ne of the most critical e-government challenges facing many governments today is how to bridge the digital divide."

As recently as April 2012, about 20% of adults in the U.S. still do not use the Internet, with even higher non-usage rates for older Americans, the poor, and those with a high school education or less. ²¹⁹ The percentage of individuals lacking access to a *high-speed or broadband* connection to the Internet is also higher. According to the most current estimates, about a third of the population has no access to a high-speed or broadband connection. ²²⁰ As a Department of Commerce report recently noted:

Significant gaps in Internet usage still exist among certain demographic and geographic groups around the country. People with college degrees adopt broadband at almost triple the rate of those with some high school education (84% versus 30%), among adults 25 years and older. The [broadband adoption] rates for White (68%) and Asian non-Hispanics (69%) exceed those for Black non-Hispanics (50%) and Hispanics (45%) by 18 percentage points or more. Rural America lags behind urban areas by ten percentage points (60% versus 70%). ²²¹

agency rulemakings"); Balla & Daniels, *supra* note 18, at 54 (reporting that the median number of comments filed on Department of Transportation rulemakings was only thirteen during the period studied).

^{217.} *Cf.* Franklin S. Reeder et al., Nat'l Acad. of Pub. Admin., National Dialogue on Health Information Technology and Privacy 46 (2009), *available at* http://www.napawash.org/wp-content/uploads/2011/01/09-04.pdf (defining the "digital divide" as both a "gap between those citizens who have access to technology such as computers and the Internet, and those who do not," and a "gap between those who choose to participate in this type of use of the technology and those who don't").

^{218.} U.N. DEP'T OF ECON. & SOC. AFFAIRS, supra note 41, at 88.

^{219.} Who's Online: Internet User Demographics, PEW INTERNET & AM. LIFE PROJECT, http://www.pewinternet.org/Trend-Data-%28Adults%29/Whos-Online.aspx (last updated Apr. 2012).

^{220.} Digital Nation: Expanding Internet Usage, U.S. DEP'T COM. NAT'L TELECOMM. & INFO. ADMIN., 2 (Feb. 2011), http://www.ntia.doc.gov/files/ntia/publications/ntia_internet_use_report_february_2011.pdf; Aaron Smith, Home Broadband 2010, PEW INTERNET & AM. LIFE PROJECT, 2 (Aug. 11, 2010), http://www.pewinternet.org/~/media/Files/Reports/2010/Home%20broadband%202010.pdf.

^{221.} U.S. DEP'T COM. NAT'L TELECOMM. & INFO. ADMIN., supra note 220, at 2.

The digital divide between the "information rich and poor" also tracks the divide between the economic rich and poor. According to estimates by a Pew Foundation Internet research project, close to 90% of those making \$75,000 a year or more use high-speed connections, compared with only 45% of those who earn less than \$30,000 a year.

Despite these disparities in access to high-speed Internet, most regulatory agencies do not provide the most easily accessible website form for low-bandwidth users: a text-only option. As noted in Part III of this article, only 3% of agency websites were found to have a text-only option—and none of these were the agencies that engaged in rulemaking most frequently. By contrast, one can easily find members of Congress who have text-only or other low-bandwidth options for their websites. It is true, of course, that agency websites are larger, more complex, and more information-intensive than the website for a member of Congress. It is also true that agency web developers have been sensitive to access to low-bandwidth users and do make efforts to optimize the size of images so that their websites can load as quickly as possible. But it is also true that, as agency websites develop, they tend to use more photo images and provide more video and audio content, which will make access still harder for those with low-bandwidth connections. ²²⁶

At least a few of my interview respondents seemed relatively unconcerned about low-bandwidth users, especially given the trend toward increasing access to high-bandwidth connections. Still other respondents suggested it would be too difficult to create and maintain a separate text-only website. Yet, at least a few agencies are starting to create separate web interfaces designed for use on handheld devices, a laudable approach that will expand the usability and accessibility of information for those with so-called smart phones. That same effort to create a dual interface for mo-

^{222.} See Pippa Norris, Digital Divide: Civic Engagement, Information Poverty, and the Internet Worldwide 4 (2001).

^{223.} *Id.* at 16 (noting that inequalities in Internet access arise from "deep divisions of social stratification within postindustrial societies.").

^{224.} See Smith, supra note 220, at 8.

^{225.} Compare U.S. SEC. & EXCHANGE COMMISSION, http://www.sec.gov (last visited June 15, 2011) (a lower-resolution site), with U.S. ENVTL. PROTECTION AGENCY, http://www.epa.gov (last visited June 15, 2011) (a higher-resolution site).

^{226.} See generally Samuel Ryan, The Evolution of Websites: How Ten Popular Websites Have (And Have Not) Changed, WAKE UP LATER, http://www.wakeuplater.com/website-building/evolution-of-websites-10-popular-websites.aspx (last visited June 15, 2011) (displaying screenshots of popular websites taken at intervals to show how web design has changed over time, with a number of sites becoming obviously more graphic intensive).

^{227.} See, e.g., MyTSA Mobile Application, TRANSP. SECURITY ADMIN., http://www.tsa.gov/travelers/mobile/index.shtm (last visited June 9, 2011); Apps for the Environment, U.S. ENVTL. PROTECTION AGENCY, http://www.epa.gov/appsfortheenvironment/ (last visited June 9, 2011); see also Alice Lipowicz, Gov 2.0 on the Go: Agencies Hit it Big with Mobile Apps,

bile devices, however, could be adapted for a text-only version of websites for users with low bandwidth. If nothing more, the emergence of these mobile sites suggests that it is feasible to create a separate, text-only interface for low-bandwidth users. Until high-speed access is pervasive across all strata of society, any agency that makes full public access and participation a priority should explore such low-bandwidth options.

3. Access for Individuals with Disabilities

According to some estimates, as much as 8% of the Internet community has a disability that requires the use of assistive technology; the largest proportion of Internet users with disabilities are individuals who have sight-related limitations. Under section 508 of the Rehabilitation Act, agencies using information technology must ensure that individuals with disabilities can achieve parity with individuals without disabilities in their access to agency information. Pegulations implementing section 508 call for, among other things, websites to provide "[a] text equivalent for every non-text element and a "text-only page, with equivalent information or functionality . . . when compliance cannot be accomplished in any other way."

As an adjunct to my comprehensive study of agency websites and social media discussed in Part III of this article, a separate study focused on more than a dozen agency websites' accessibility to blind or visually-impaired users. Each site was reviewed in two ways. First, sites were reviewed using the JAWS screen reader, a popular tool for visually-impaired users that converts information displayed on a website into audio format and "reads" it back to the user. For this study, a sighted research assistant read each agency website at the same time as she listened to the audio provided by the JAWS reader. Second, each site was subsequently evaluated for accessi-

FED. COMPUTER WK. (Apr. 8, 2011), http://fcw.com/Articles/2011/04/11/FEAT-government-mobile-apps.aspx?Page=1.

^{228.} U.S. DEP'T OF HEALTH & HUM. SERVS. & U.S. GEN. SERVS. ADMIN., *Accessibility, in* RESEARCH-BASED WEB DESIGN & USABILITY GUIDELINES 22, 23 (2006), *available at* http://www.usability.gov/pdfs/chapter3.pdf.

^{229.} Rehabilitation Act Amendments of 1998, 29 U.S.C. § 794d (2006) (agencies must ensure that their information technology allows "individuals with disabilities who are members of the public seeking information or services from a federal department or agency to have access to and use of information and data that is comparable to the access to and use of the information and data by such members of the public who are not individuals with disabilities").

^{230. 36} C.F.R. § 1194.22(a) (2010).

^{231. 36} C.F.R. § 1194.22(k) (2010).

^{232.} The reviewer used JAWS version 8.0 with Internet Explorer 5.0, the versions available in the local Philadelphia public library which provided the software and testing location.

bility using WAVE, a tool that analyzes the code behind the webpage to identify possible accessibility problems. WAVE is one of a variety of tools that web developers can use to identify accessibility problems. Although the WAVE analysis is informative for web developers, for our purposes the JAWS review by a sighted user is most revealing, for it provides a true test of whether all website information available to sighted users will also be accessible in practice to visually-impaired users.

Although about half of the websites reviewed presented no serious issues, those that did present accessibility issues usually did so because of images that had no corresponding textual tags or because of links that were not fully represented in textual form. Sometimes these problems occurred on websites that otherwise used much more advanced and sophisticated designs for the sighted user. For example, to the sighted user, the EPA's website organizes a large volume of information in a clear, visually compelling manner.²³³ The EPA homepage is divided into tabbed sections (e.g., "Learn the Issues," "Science and Technology," and "Laws and Regulations"), each of which contains a drop-down menu filled with many additional links.²³⁴ Unfortunately, the screen reader could not read the names of any of these core links-a deficiency which would prevent a blind user from navigating anywhere else in the EPA website. The reviewer also noted a color-coded map and various graphics on the EPA homepage that had no corresponding textual elements, and hence were also "invisible" to the screen reader and by extension to a blind user.²³⁵

Continued vigilance is obviously needed to ensure that agency websites and other electronic media will be as accessible to individuals who have impaired vision as they are to other users. This accessibility may grow even more challenging in the wake of new techniques for organizing a large volume of information on a website. Indeed, as the EPA example suggests, a tradeoff may exist between packing more information onto a homepage, such as by using pull-down tabs, and providing equivalent accessibility to the blind. Nevertheless, images and graphics need to be consistently tagged with descriptive terms, especially when the images form buttons that are central to navigate through the webpage or otherwise convey useful information.

^{233.} See U.S. ENVTL. PROTECTION AGENCY, http://www.epa.gov (last visited June 9, 2011).

^{234.} Id

^{235.} In addition to the review by my research assistant, I also listened to the JAWS rendition of the EPA site, confirming this example. Data results are available from the author upon request.

Recommendation 5. Agencies Should Display Comment Policies in Accessible

Locations or Provide Links to These Policies in Multiple, Accessible

Locations, Especially on Webpages That Elicit Comments from the Public

Respondents to the interviews discussed in Part IV frequently referred to their agencies' practice of removing user comments from their websites if they contain obscenities or profanity or if they promote commercial products. Deleting such comments is usually authorized by comment policies established by each agency. For example, the EPA has a comment policy that explains that the agency expects "comments generally to be courteous."236 The EPA policy also makes clear that the agency can decline to post or can remove comments that are submitted that do not comply with the stated policy.²³⁷ Such a comment policy generally accords with current state-of-the-art practices, but at present the comment policies for many agencies cannot be found easily by the public. I asked an experienced law student to review the websites for the ten agencies that scored the highest overall on the ranking of websites in Part III of this article (Table 2), but in only two instances could he find a comment policy.²³⁸ When asked to search for five minutes from the EPA's website (ranked thirteenth) for its comment policy, he could not locate it either. Even on webpages dedicated to the submission of comments, a comment policy is not always visible to the user. For example, the CFTC website contains a webpage that allows users to comment on regulations that are currently open for comment, but nowhere on the page can one find the agency's comment policy or a direct link to it. 239 To find the policy, the user must click on a link labeled "How to Submit a Comment," go to another webpage, and then scroll to the bottom of the new page.²⁴⁰

^{236.} *EPA Comment Policy*, U.S. ENVTL. PROTECTION AGENCY, http://www.epa.gov/epahome/commentpolicy.html (last visited June 7, 2011).

^{237.} *Id*

^{238.} The student, who had prior experience working with a federal regulatory agency, was instructed to search each website for no longer than five minutes.

^{239.} Public Comments, U.S. COMMODITY FUTURES TRADING COMMISSION, http://comments.cftc.gov/PublicComments/ReleasesWithComments.aspx (last visited Oct. 14, 2011). The earlier version of EPA's Reg DaRRT—the Rulemaking Gateway—suffered the same deficiency. Although the Gateway had a page dedicated to submitting comments, nowhere on that page could a user find information or a link related to the agency's comment policy. The issue is now moot, as EPA removed the comment page altogether when it converted the Gateway to Reg DaRRT. See infra notes 189–192 and accompanying text.

^{240.} How to Submit a Comment, U.S. COMMODITY FUTURES TRADING COMMISSION, http://www.cftc.gov/LawRegulation/PublicComments/HowtoSubmit/index.htm (last visited Oct. 14, 2011).

Recommendation 6. Agencies Should Develop Systematic Protocols for the Retrieval of Old Material Online

Online material ages and, as in life, the aging process requires attention. For websites, aging presents two distinct types of concerns. First, most agency websites already contain at least ten to fifteen years worth of online material. As a result, when searching for information at agency webpages, users may retrieve old material mixed with newer material. If users are coming to the agency webpage and conducting a search with a new proceeding in mind, they may find the search results incomprehensible if the search mixes much of the older material in with the new material. For example, the FDA recently published a notice and request for comments in the May 23, 2011, edition of the Federal Register, entitled "Preventive Controls for Registered Human Food and Animal Food/Feed Facilities."241 However, a search on the FDA website using the terms "preventive controls animal feed"242 and a separate search using the terms "preventive controls animal feed proposed rule"243 resulted in no search results related to the recently proposed rule; some hits in the top ten results were from documents as old as 2009, and one even as old as 2008. It was similarly impossible to find relevant search results on the Department of Agriculture's website related to a recently proposed rule regarding the Horse Protection Act, published in the Federal Register on May 27, 2011.²⁴⁴ Searches with more particularized terms at least provided information related to the Horse Protection Act, 245 but searches with less particularized terms provided completely irrelevant or old information.²⁴⁶

^{241.} Preventive Controls for Registered Human Food and Animal Food/Feed Facilities, REGULATIONS.GOV, http://www.regulations.gov/#!documentDetail;D=FDA-2011-N-0238-0001 (last visited June 2, 2011).

^{242.} Search Results: preventive controls animal feed, U.S. FOOD & DRUG ADMIN. (June 2, 2011, 9:50 AM), http://google2.fda.gov/search?q=preventive+controls+animal+feed&x=0&y=0&client=FDAgov&site=FDAgov&lr=&proxystylesheet=FDAgov&output=xml_no_dtd&getfields=*.

^{243.} Search Results: preventive controls animal feed proposed rule, U.S. FOOD & DRUG ADMIN. (June 2, 2011, 9:51 AM), http://google2.fda.gov/search?q=preventive+controls+animal+feed+proposed+rule&x=0&y=0&client=FDAgov&site=FDAgov&lr=&proxystylesheet=FDAgov&output=xml_no_dtd&getfields=*.

^{244.} Horse Protection Act: Requiring Horse Industry Organizations to Assess and Enforce Minimum Penalties for Violations, REGULATIONS.GOV, http://www.regulations.gov/#!documentDetail;D=APHIS-2011-0030-0001 (last visited June 2, 2011).

^{245.} Search Results: horse protection act proposed rule, U.S. DEP'T AGRIC. (June 2, 2011, 10:25 AM), http://usda.gov/wps/portal/usda/usdahome?q=horse+protection+act+proposed+rule&x=0&y=0&navid=SEARCH&Go_button.x=21&Go_button.y=11&site=usda.

^{246.} Search Results: horse protection act, U.S. DEP'T AGRIC. (June 2, 2011, 10:21 AM), http://usda.gov/wps/portal/usda/usdahome?q=horse+protection+act&x=0&y=0&navid=SEA RCH&Go button.x=21&Go button.y=11&site=usda.

Second, agencies are changed or reorganized from time to time, raising the question of how their webpages will be archived. For example, following the disastrous 2010 oil spill in the Gulf Coast, the Department of Interior dismantled the Minerals Management Service (MMS) and created in its place a new Bureau of Ocean Energy Management, Regulation, and Enforcement (BOEMRE). But the old MMS website still can be found online, and only some, not all, of the links on it redirect the user to the appropriate new page on the BOEMRE website.²⁴⁷ In a similar way, the website for the Rural Utilities Service (RUS) was redesigned and integrated into the Department of Agriculture's Rural Development agency's website, but the URL for the old site still pointed to that former, separate website.248 Furthermore, the older RUS site remained available online for about a year without its content being updated and without providing autoforwarding or even a clear manual link directing users to the new site.²⁴⁹ Some of the internal links on the page did redirect the user to the relevant page of the USDA Rural Development website, but other links took the user to portions of the still intact, yet outdated RUS website. 250 No explanation on either website could be found explaining the reorganization of the former RUS website.²⁵¹

Agencies should be encouraged to develop standard protocols for handling both kinds of aging issues. Old materials do need to be preserved for archival, historical, and legal reasons, but the way these materials are stored

^{247.} See MINS. MGMT. SERVICE, http://www.boemre.gov/mmshome.htm (last visited June 2, 2011). To the Department of Interior's credit, when BOEMRE was subsequently split and reorganized across two new bureaus in October, 2011, following the initial release of my report to ACUS, the Department created a very clear page redirecting users to the new bureaus as well as explaining the organizational changes. Reorganization of the Bureau of Ocean Energy Management, Regulation and Enforcement, U.S. DEP'T INTERIOR, http://www.boemre.gov/ (last visited Aug. 7, 2012). However, as with MMS's website, the old BOEMRE site remains online, and users who find their way to it through other means (including via redirecting links in the old MMS website) will have no way of knowing that BOEMRE no longer exists. Even a page on BOEMRE's website labeled "Navigation Tips," dedicated as it is to "help[ing] you navigate our website a little easier"—not to mention wishing the user "happy browsing!"—provides no hint that BOEMRE is no more. Navigation Tips, BUREAU OCEAN ENERGY MGMT., REG. & ENFORCEMENT, http://www.boemre.gov/Topics/navtips.htm (last visited Aug. 7, 2012).

^{248.} U.S. DEP'T AGRIC., http://www.usda.gov/rus/ (last visited June 2, 2011). A clear manual link forwarding users to the new website was subsequently added. Older versions of the Rural Utilities Services have been captured by third-party Internet archivists and interested readers can access those older pages at http://wayback.archive.org/web/*/http://www.usda.gov/rus/.

^{249.} U.S. DEP'T AGRIC., http://www.usda.gov/rus/ (last visited June 2, 2011). As of June 2, 2011, the most recent content on this page had been dated July 8, 2010.

^{250.} Id.

^{251.} See id.; Utilities, U.S. DEP'T AGRIC., http://www.rurdev.usda.gov/Utilities_LP.html (last visited June 2, 2011).

and retrieved needs to be more consistently and clearly systematized, and search display algorithms need to be deployed with the existence of older materials in mind. Similarly, better, more consistent practices are needed for retaining old websites but providing notice that they are out-of-date and directing users as appropriate to current sites.

Recommendation 7. Agencies Should Conduct Ongoing Evaluations of Their Use of the Internet Against the Goals of E-Rulemaking

Especially with new uses of electronic media, systematic evaluations will be needed if agency officials are to learn better how to use electronic media to advance the principal goals of e-rulemaking, namely, promotion of democratic legitimacy, improvement of policy decisions, and lowering of administrative costs. Collaborations between government agencies and university researchers, such as the DOT's current collaboration with Cornell University on the Regulation Room project, can assist in implementing such in-depth evaluations.

In evaluating agency use of electronic media in rulemaking, agency officials should focus on the overarching goals of e-rulemaking rather than on simply measuring users' satisfaction. Of course, satisfying users is fine, even commendable, but it should not become the main evaluative criteria of agency use of electronic media. This point bears emphasis because agency officials undoubtedly find that it is easiest to "evaluate" new media uses by asking users if they are satisfied, something that can be readily facilitated by user satisfaction surveys or feedback buttons on websites. However, as I have discussed at length elsewhere, such an approach raises numerous methodological and conceptual problems. The satisfaction of those who reply to a user survey or respond to a feedback button does not necessarily mean that an agency has best advanced the overall public interest.

With agency website design, there is a real risk that user satisfaction will result in a status quo lock-in effect if websites become increasingly optimized for current users rather than the broader public. The FCC's decision to list "Rulemaking" on a tab under "Businesses and Licensing" rather than under both "Businesses and Licensing" and "Consumers" may reflect, even if just subconsciously, the current bias in participation in FCC rulemakings. Undoubtedly even FCC officials would agree, though,

^{252.} Coglianese, Information Technology, supra note 15, at 372.

^{253.} For an example of such a satisfaction survey, see *supra* notes 5–6 and accompanying text.

^{254.} Cary Coglianese, Is Satisfaction Success? Evaluating Public Participation in Regulatory Policymaking, in The Promise and Performance of Environmental Conflict Resolution 69 (Rosemary O'Leary & Lisa B. Bingham eds., 2003).

^{255.} FED. COMM. COMMISSION, http://www.fcc.gov (last visited June 9, 2011).

that the agency's goal should not be to design its website so as to assist business users at the expense of others, even if businesses are currently the most frequent users of the FCC website. A similar status quo bias can perpetuate accessibility problems of the kind discussed above in connection with Recommendation 4. Since low-bandwidth, non-English speaking, and vision-impaired individuals make up a minority of users, agency officials who view their principal role as one of pleasing their "customers" are more likely to downplay the need for efforts to increase accessibility to all segments of the public. Finally, as discussed in connection with Recommendation 1, an excessive emphasis on an agency's "top tasks," if defined solely in terms of user frequency, could lead agencies to neglect altogether access to information about the substantively significant task of rulemaking.

If one goal of e-rulemaking is to maximize accessibility and use by as many members of the public as possible, then the feedback from current users—as helpful as it may be for some purposes—will still be woefully incomplete. Asking users if they are satisfied will elicit little or no information about why some interested or affected parties do *not* use a tool or media application under evaluation. For example, agency officials might well ask why so few people have participated in the Department of Transportation's Regulation Room, created by Cornell University. Yet answering an important question like that will require more than just soliciting feedback from the users.

CONCLUSION

People spend an increasing amount of time online, whether for social interaction, online shopping, entertainment, or work. Corresponding with this overall trend in online activity, agency websites have over the last fifteen years become a key vehicle for public interaction with the federal government. In the years ahead, agencies' use of social media and other interactive web-based tools may well become just as ubiquitous as the agency website.

Although agencies will continue to use electronic media to support all of their services and activities, making rules that efficiently and equitably solve society's problems will remain one of government's most fundamental responsibilities. In this article, I have focused on ways that agencies could

^{256.} See Cynthia R. Farina et al., Rulemaking in 140 Characters or Less: Social Networking and Public Participation in Rulemaking, 31 PACE L. REV. 382, 400 (2011) (observing that "the results [of soliciting comments on a Department of Transportation rulemaking via Regulation Room] were disappointing" with a "volume of response . . . far less than we, and DOT, had expected").

use electronic media to improve the accessibility of the rulemaking process. Until recently the process that generates thousands of binding rules each year was generally impenetrable for the average member of the public. The Internet has now made possible a range of new ways of organizing and disseminating rulemaking information as well as soliciting public input.

Agencies need to use wisely the opportunities the Internet provides to advance the quality and legitimacy of the rulemaking process. This article has provided an overview of agency "best practices" in using electronic media to support rulemaking as well as the results from new quantitative and qualitative research. This research has identified the practices of some agencies—such as, to pick one example, the development of EPA's original Rulemaking Gateway (the predecessor to its current Reg DaRRT)—that merit replication by other agencies. It has also revealed gaps and concerns that any agency should consider when undertaking future efforts at web design or the deployment of social media. The recommendations I have offered in this article provide concrete direction for agencies as they seek to improve their use of electronic media to make the rulemaking process more accessible to all.