

Article

Automated Agencies

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INTRODUCTION

Through chatbots, virtual assistants, and other automated tools, federal agencies are increasingly relying on artificial intelligence to help the public understand and apply the law.¹ This development of what we refer to herein as “automated legal guidance tools,” which includes tools such as virtual assistants and chatbots, is the result of multiple pressures that federal agencies face. Federal agencies have to contend with expectations that

1. See, e.g., AI in Government Act of 2019, S. 1363, 116th Cong. § 3(a), (b)(3) (2019) (proposing the establishment of and duties for an “AI Center of Excellence” to aid the federal government in using AI); *Artificial Intelligence: With Great Power Comes Great Responsibility: Joint Hearing Before the Subcomm. on Rsch. & Tech. and the Subcomm. on Energy of the H. Comm. on Sci., Space & Tech.*, 115th Cong. (2018) (exploring potential promise and perils of emerging artificial intelligence technologies); *Artificial Intelligence for the American People*, TRUMP WHITE HOUSE ARCHIVE, <https://trumpwhitehouse.archives.gov/ai> [<https://perma.cc/A6B6-G3QJ>] (summarizing the various AI initiatives implemented by the Trump Administration); *Summary of the 2018 White House Summit on Artificial Intelligence for American Industry*, TRUMP WHITE HOUSE ARCHIVE 6 (May 10, 2018), <https://trumpwhitehouse.archives.gov/wp-content/uploads/2018/05/Summary-Report-of-White-House-AI-Summit.pdf> [<https://perma.cc/6CME-XNKU>] (discussing how “[e]xecutive departments and agencies are applying AI to improve the provision of government services to the American people”).

they will provide customer service experiences akin to those provided by the private sector.² Further, when explaining the law and regulatory programs to the public, including through internet-based technological tools, agencies are bound by the Plain Writing Act.³ This statute requires federal agency communications with the public to be “clear, concise, [and] well-organized.”⁴ Perhaps even more importantly than this mandate, agencies themselves profess that many members of the public simply are not willing to read complex legal requirements.⁵ At the same time, many federal agencies are perpetually strapped for resources, limiting their abilities to provide clear explanation of the law to the public.⁶ Artificial intelligence seems to promise the government a way to respond to these competing pressures to explain the law, both quickly and clearly, in line with private sector standards, albeit with limited government resources. For this reason, as we explore in this Article, the federal government is already using automated legal guidance tools to respond to tens of millions of inquiries from the public about application of the law.⁷

2. Kathleen Walch, *How the Federal Government’s AI Center of Excellence Is Impacting Government-Wide Adoption of AI*, FORBES (Aug. 8, 2020), <https://www.forbes.com/sites/cognitiveworld/2020/08/08/how-the-federal-governments-ai-center-of-excellence-is-impacting-government-wide-adoption-of-ai/?sh=45de28f16660> [https://perma.cc/P6YN-TN5V] (quoting Neil Chaudhry, Director, AI Implementations at the AI Center of Excellence within the General Service Administration: “The American public, conditioned by the private sector, expect better engagement with government agencies”).

3. Plain Writing Act of 2010, Pub. L. No. 111-274, 124 Stat. 2861 (2010).

4. *Id.* § 3(3). Federal agencies also must create plans and procedures to ensure compliance with, and transparency regarding, their plain language efforts. *See id.* § 4. The Center for Plain Language annually evaluates how well federal agencies are complying with the Plain Language Act on their websites, in terms of organizational compliance and quality of writing. *Reports*, CTR. FOR PLAIN LANGUAGE, <https://centerforplainlanguage.org/reports> [https://perma.cc/MXV4-2CJP] (providing a link to the annual “report cards” for every federal agency).

5. *See infra* Part II.B (discussing agencies’ goal of making complex information more usable).

6. *See, e.g.*, Brian Naylor, *The IRS Faces Backlogs from Last Year as a New Tax Filing Season Begins*, NPR (Jan. 24, 2022), <https://www.npr.org/2022/01/24/1074793780/when-are-taxes-due-irs-phones-backlog> [https://perma.cc/AXA6-4VPB] (describing huge backlogs at the IRS and extreme underfunding, resulting in taxpayers having “a 1 in 9 chance of getting their phone calls [to the IRS] answered”).

7. *See, e.g., infra* text accompanying note 96 (noting that USCIS’s Emma

Despite this significant development, scholarly study of automated guidance by federal agencies remains in the early stages. Most scholars who have studied artificial intelligence and federal agencies have not focused on agencies' use of technology to offer guidance to the public. For instance, among other things, scholars have explored the government's use of artificial intelligence to make enforcement decisions,⁸ design regulations,⁹ and make benefits and entitlement determinations.¹⁰ Prior studies have provided important, broad-based perspectives about government use of AI,¹¹ as well as frameworks for when the government should automate machine learning tools for decision making.¹² However, this research has not focused on the government's use of automation to explain the law.¹³

We believe that government explanations of the law to the public have particular importance.¹⁴ Many, if not most, members

has “successfully responded to more than 35 million inquiries from more than 11 million users”).

8. See, e.g., Sandra G. Mayson, *Bias In, Bias Out*, 128 YALE L.J. 2218 (2019) (exploring racial bias in algorithmic criminal justice).

9. See, e.g., Cary Coglianese & David Lehr, *Regulating by Robot: Administrative Decision Making in the Machine-Learning Era*, 105 GEO. L.J. 1147 (2017) (exploring the use of machine learning in the administrative rulemaking process).

10. See, e.g., Danielle Keats Citron, *Technological Due Process*, 85 WASH. U. L. REV. 1249, 1267–77 (2008) (exploring, as examples, state public benefits systems, alongside more enforcement-based decisions such as the “No Fly list”).

11. See David Freeman Engstrom, Daniel E. Ho, Catherine M. Sharkey & Mariano-Florentino Cuéllar, *Government by Algorithm: Artificial Intelligence in Federal Administrative Agencies*, ADMIN. CONF. OF THE U.S. 6–8 (Feb. 2020), <https://law.stanford.edu/wp-content/uploads/2020/02/ACUS-AI-Report.pdf> [<https://perma.cc/LZZ6-ZXNY>] (summarizing the need for the ACUS-commissioned study underlying the report and the five main takeaways of the study).

12. See, e.g., Cary Coglianese, *A Framework for Governmental Use of Machine Learning*, ADMIN. CONF. OF THE U.S. (Dec. 2020), <https://www.acus.gov/sites/default/files/documents/Coglianese%20ACUS%20Final%20Report%20w%20Cover%20Page.pdf> [<https://perma.cc/U9AT-DEBU>].

13. But see, e.g., Citron, *supra* note 10, at 1266 (noting that one type of government mixed automation system may “generat[e] automated advice for citizens and entities, who may then use the advice to make further decisions”).

14. See generally Joshua D. Blank & Leigh Osofsky, *The Inequity of Informal Guidance*, 75 VAND. L. REV. 1093 (2022) [hereinafter Blank & Osofsky, *The Inequity of Informal Guidance*] (exploring generally the role that informal government guidance can play in compelling certain members of the public to make decisions and examining the accompanying equity issues); Joshua D. Blank & Leigh Osofsky, *Automated Legal Guidance*, 106 CORNELL L. REV. 179 (2020) [hereinafter Blank & Osofsky, *Automated Legal Guidance*] (critiquing existing

of the public lack access to legal counsel who can analyze sources of law underlying summaries offered by federal government agencies.¹⁵ This dynamic is intensified by the complexity of many regulatory regimes.¹⁶ The result is that, for most members of the public, the guidance they obtain from government explanations of the law will be practically binding.¹⁷ As the government expands its use of automated legal guidance, this power to shape public behavior will only grow, even if it is unchecked by administrative rules and procedures that are supposed to monitor government guidance. While automated legal guidance may represent a laudable attempt by federal agencies to explain complex law to the public in as easy-to-understand a fashion as possible, at present, there is a failure to appreciate what may be lost, and the tradeoffs associated with these efforts.

This Article describes the results of a qualitative study of automated legal guidance across the federal government. This study was conducted under the auspices of the Administrative Conference of the United States (ACUS), an independent federal

automated legal guidance systems and offering recommendations for better future implementation). A long line of literature has explored the role that government guidance generally (outside the automated context) can play in compelling the public to take positions in accordance with government guidance. For one of the canonical works on the matter, see Robert A. Anthony, *Interpretive Rules, Policy Statements, Guidances, Manuals, and the Like—Should Federal Agencies Use Them to Bind the Public?*, 41 DUKE L.J. 1311 (1992) (setting forth how informal guidance can practically bind the public and examining the consequences of this feature of the administrative guidance system). For more recent work on the topic, see, for example, Michael S. Greve & Ashley C. Parish, *Administrative Law Without Congress*, 22 GEO. MASON L. REV. 501, 532–34 (2015) (exploring potentially coercive nature of administrative guidance documents).

15. See Blank & Osofsky, *The Inequity of Informal Guidance*, *supra* note 14, at 1098 (“Formal law in many areas is often comprised of complex statutes, regulations, and other legal materials that are difficult for much of the public to understand.”).

16. See *id.* at 1104 (“To make matters even more complicated, as detailed as statutory and regulatory regimes are, they nonetheless leave many open questions.”).

17. See, e.g., Jessica Mantel, *Procedural Safeguards for Agency Guidance: A Source of Legitimacy for the Administrative State*, 61 ADMIN. L. REV. 343, 354 (2009) (“Guidance documents often have a substantial impact on regulated parties, beneficiaries of government programs, and the public.”).

agency of the U.S. government charged with recommending improvements to administrative process and procedure.¹⁸ Our goal was to understand federal agency use of automated legal guidance and offer recommendations to ACUS based on our findings. During our study, we canvassed the automated legal guidance activities of all federal agencies. We found extensive use of automation to offer guidance to the public by federal agencies, with varying levels of sophistication and legal content. We identified two principal models of automated legal guidance, and we conducted in-depth legal research regarding the most sophisticated examples of such models. We also conducted semi-structured interviews with agency officials with direct, supervisory, or support responsibility over well-developed automated legal guidance tools.¹⁹ Each interview consisted of a range of questions, including questions regarding the agency's reasons for developing the automated tool, the process for designing and maintaining the tool, how the agency coordinates the tool's guidance with the agency's guidance more generally, and methods for evaluating the effectiveness of the tool, among others.

Our study finds that automated legal guidance offers several benefits to both agencies and the public.²⁰ First, automated tools provide members of the public with answers to their questions faster and more efficiently than human customer service representatives are able to provide.²¹ Second, agency officials viewed automated legal guidance as helping individuals navigate complex legal rules and procedures and as also aiding third party advisors, such as accountants and lawyers, who may be

18. *See generally About ACUS*, ADMIN. CONF. OF THE U.S., <https://www.acus.gov/administrative-conference-united-states-acus> [<https://perma.cc/SF2S-UGMX>] (describing the mission and work of the ACUS).

19. In this study, we did not interview users of the automated legal guidance products. As we will discuss in more detail below, the agencies themselves typically focus on user experience through user surveys. *See infra* Part II.G (discussing user experience surveys as a current form of agency evaluation). In this study, we wanted to focus on aspects of automated legal guidance that would not be captured by user experience including, principally, how the law is translated to the public and what sorts of guardrails are in place in this process. We do think that continued study of user experience, including through surveys of the users, is a fruitful area of continuing research. We certainly believe that agencies themselves should be attentive to user experience as they continue to develop automated legal guidance.

20. *See infra* Part III.A.

21. *See infra* Part III.A.1 (discussing the benefit of administrative efficiency).

assisting users with their legal compliance obligations.²² Last, agency officials described how automated legal guidance enables their agencies to clearly and transparently state agency views on legal issues to the public and their advisors.²³

At the same time, our study highlights potential drawbacks of agency reliance on automated legal guidance as the primary way to advise members of the public.²⁴ First, through our review of agencies' automated tools, we found that such tools can provide guidance to members of the public that deviates from formal law.²⁵ As we will describe, the automated tools we studied sometimes portray unsettled formal law as unambiguous, add administrative gloss, and omit discussion of statutory and regulatory exceptions and requirements.²⁶ Second, through our review of automated tools, we found that agencies provide members of the public with little, if any, notice regarding the formal laws upon which their automated legal guidance relies, and of the limited legal authority of statements made by these tools.²⁷ Further, our interviews confirmed that no federal agency publishes an archive of changes made to their automated tools' questions and answers, and none appears to have plans to do so in the future.²⁸ Last, our study shows that, without reform, these tools may worsen the access to justice gap between individuals based on their wealth, income, and other statuses.²⁹

We also found that agencies were not adequately apprised of the potential costs and drawbacks of their automated legal guidance tools, or how automation of legal guidance may increase the tendency of federal agencies to present complex law as though it is simple without actually engaging in simplification

22. See *infra* Part III.A.2 (discussing benefit of translating complex laws into plain language).

23. See *infra* Part III.A.3 (discussing benefit of providing agency interpretation of the law).

24. See *infra* Part III.B (discussing costs of automated guidance).

25. See *infra* Part III.B.1 (discussing deviation costs).

26. See *infra* Part III.B.1.

27. See *infra* Part III.B.2 (discussing the lack of notice costs).

28. See *infra* notes 235–37 and accompanying text (noting the impact of the lack of notice stemming from agencies not archiving past automated legal guidance).

29. See *infra* Part III.B.3 (summarizing the threat to equality of justice posed by automated legal guidance).

of the underlying law.³⁰ For instance, some agencies favored usability of the product,³¹ but at the cost of potentially obscuring some of the ways that the guidance may deviate from the underlying, formal law.³² Across the board, we found limited evaluation by agencies, with feedback focused on customer usability,³³ not fundamental questions about how the guidance dovetails with the underlying statutory and regulatory scheme.³⁴ We also heard little concern by agencies regarding the ways that their guidance may be a poor fit in a given circumstance for the question asked, or ways in which users may be relying on the guidance despite agency beliefs that the guidance should not create user reliance.³⁵

Lack of appreciation by agencies of the costs of automated legal guidance, and lack of study of such guidance, is problematic. Automated legal guidance is not necessarily uniquely problematic, relative to alternatives. The question of how to respond to complex legal problems, considering a public that has limited ability or inclination to understand complex legal systems, is a difficult one. There are different, potential solutions to this problem, which each present their own series of cost-benefit tradeoffs. However, failure to appreciate or examine the tradeoffs inherent in automated legal guidance, relative to the alternatives, undermines our ability to make informed decisions about when to use which solution and how to minimize some of the costs of automated legal guidance. Moreover, ignoring the problems with automated legal guidance means that these problems may be disproportionately, and inequitably, borne by members of the public least capable of obtaining alternative legal guidance.

After presenting and analyzing our findings regarding automated legal guidance, we offer policy reform recommendations.³⁶

30. See *infra* Parts III.C & III.D (noting agencies' evaluation of automated legal guidance and the consideration given to its costs and benefits).

31. See *infra* Part II.B (explaining usability).

32. See *infra* Part III.C (stating automated legal guidance can "obscure what the law actually is").

33. See *infra* Part II.G (evaluation).

34. See *infra* Part II.E and text accompanying notes 263–73 (summarizing that agencies did not believe their automated legal guidance could be "wrong").

35. See *infra* Part II.F (noting agencies discounting potential user reliance on automated guidance for general or user-specific inquiries).

36. See *infra* Part IV (proposing recommendations). In June 2022, at its plenary session, ACUS adopted twenty recommendations based on our report

As we describe, a single comprehensive reform that would address all potential drawbacks of automated tools without diminishing their potential benefits to agencies and the public is not likely to appear. Instead, we offer multiple, detailed policy recommendations for federal agencies that have introduced, or may introduce, automated legal guidance tools to the public. Our recommendations are organized into five general categories: (a) transparency; (b) reliance; (c) disclaimers; (d) process; and (e) accessibility, inclusion, and equity.

The remainder of this Article proceeds as follows. Part I describes our findings regarding the emergence of automated legal guidance at federal agencies as a means of explaining the law to the public, as well as our research regarding the ways that different automated legal guidance models respond to questions about how federal law applies. Part II describes our interviews with agency officials and common themes from these interviews. Part III extracts from our research the benefits as well as the costs of federal agencies' use of automated legal guidance tools, and considers the tradeoffs of automated legal guidance, relative to alternatives. Part IV presents our policy recommendations regarding the use of automated legal guidance tools by federal agencies, and is followed by a brief conclusion.

I. AUTOMATION OF EXPLANATION

A. GENERAL APPLICATION ACROSS FEDERAL GOVERNMENT

Agency officials have begun to embrace the use of artificial intelligence across their agencies' operations. As a result of a variety of executive orders and statements, federal agencies have committed to promoting, developing, and using artificial intelligence in ways that seek to benefit the public at large.³⁷ Scholars

to guide federal agency use of automated legal guidance, printed the recommendations in the Federal Register, and distributed them to all federal agencies. See *Automated Legal Guidance at Federal Agencies*, ADMIN. CONF. OF THE U.S. (June 28, 2022), <https://www.acus.gov/recommendation/automated-legal-guidance-federal-agencies> [<https://perma.cc/A22L-3NBV>]; Administrative Conference of the United States Recommendation 2022-3: Automated Legal Guidance at Federal Agencies, 87 Fed. Reg. 39,801 (July 5, 2022).

37. See, e.g., Exec. Order No. 13,859, 84 Fed. Reg. 3,967 (Feb. 11, 2019), <https://www.govinfo.gov/content/pkg/FR-2019-02-14/pdf/2019-02544.pdf> [<https://perma.cc/2TS5-FRVB>] (laying a framework to continue American leadership in AI research and development); Exec. Order No. 13,960, 85 Fed. Reg. 78,939 (Dec. 3, 2020) <https://www.govinfo.gov/content/pkg/FR-2020-12-08/pdf/>

who conducted a recent, expansive study found that the government's use of artificial intelligence is "diverse and spans the federal administrative state," including in the contexts of enforcing the law, adjudicating government benefits and privileges, monitoring and analyzing risks to the public, extracting information from government data streams, and communicating with the public about its rights and obligations.³⁸ Yet, these scholars also concluded that "despite wide agency embrace of AI, the government still has a long way to go," as many agency uses of artificial intelligence remained relatively unsophisticated.³⁹

One area of significant expansion of government use of artificial intelligence is agencies' communication with the public. Federal agencies are engaging in extensive digital outreach, including website and social media communications.⁴⁰ As an outgrowth of such efforts, federal agencies are developing automated tools to answer questions from the public.

Some agencies, such as the U.S. Department of Agriculture (USDA), have developed what are essentially internet search tools. If a user accesses "AskUSDA," the user can type a question into a search box, which will then pull up "knowledge articles" from the USDA website that potentially respond to the question. For instance, typing "Can I bring produce back to the United States?" yields numerous search results including, just to name a few, "Can I bring food into the United States?," "Where can I

2020-27065.pdf [https://perma.cc/6N4E-9CTJ] (setting forth and elaborating principles regarding federal agency development and use of artificial intelligence).

38. Engstrom et al., *supra* note 11, at 6.

39. *Id.* at 7. Other scholars have examined federal agencies' experimentation with new ways of reaching the public. See, e.g., Elizabeth G. Porter & Kathryn A. Watts, *Visual Rulemaking*, 91 N.Y.U. L. REV. 1183 (2016) (exploring agencies' use of visual images in the rulemaking process). Additionally, ACUS has previously studied agencies' use of social media in rulemaking. Michael Herz, *Using Social Media in Rulemaking: Possibilities and Barriers*, ADMIN. CONF. OF THE U.S. (Nov. 21, 2013), <https://www.acus.gov/sites/default/files/documents/Herz%20Social%20Media%20Final%20Report.pdf> [https://perma.cc/478T-KWXP].

40. For instance, a visit to the Department of Labor (DOL) website reveals that the DOL uses a suite of different, internet-based technological tools to provide often complicated information to the public. The website's main page highlights "Featured Stories"; "Quick Links" to popular topics, such as the minimum wage and the Family and Medical Leave Act; recent posts to the DOL's blog; and links to Twitter posts by the DOL and its Secretary about DOL priorities and programs. U.S. DEP'T OF LAB., <https://www.dol.gov> [https://perma.cc/AQ9N-KZY2].

find regulatory and permit information for importing plants or plant products into the United States?,” “What are the regulations for importing rice into the United States?,” and “Can I bring back South African Biltong (beef jerky) into the United States of America for personal consumption?”⁴¹ Clicking on one of the search results yields a “Knowledge Article” with detailed information. For instance, clicking on the knowledge article regarding South African Biltong explains that “[t]he United States Department of Agriculture (USDA) establishes agricultural import regulations to prevent the introduction of potentially devastating animal and plant pests and diseases into the United States,” and then goes on to cite and summarize the regulations applicable to cured and dried meat from South Africa.⁴²

The U.S. Department of Veterans Affairs (VA) has likewise developed digital tools to automate interactions with the public. Recently, the VA created a coronavirus chatbot, which, during the height of the COVID-19 pandemic, allowed users to click through a series of menus to find the information they were seeking.⁴³ For instance, a user could click from a menu, “Benefits and claims,” and then click “Can I have more time to apply for Veterans’ Group Life Insurance (VGLI) after separation?” in order to find out what pandemic-related extensions existed for applying for benefits after separation from service.⁴⁴ A link at the bottom of this entry connected users to more detailed information about general eligibility for veterans’ group life insurance.⁴⁵ The

41. *AskUSDA*, U.S. DEP’T OF AGRIC., <https://ask.usda.gov/s> [<https://perma.cc/X5KF-B2S8>] (Type: “Can I bring produce back to the United States?” into the “search” box).

42. *Can I Bring Back South African Biltong (Beef Jerky) Into the United States of America for Personal Consumption?*, U.S. DEP’T OF AGRIC. (July 12, 2021), <https://ask.usda.gov/s/article/Can-I-bring-back-South-African-Biltong-beef-jerky-into-the-United-States-of-America-for-personal-con> [<https://perma.cc/C8FP-YUGR>].

43. *OIT Releases New Coronavirus Chatbot*, U.S. DEP’T OF VETERANS AFFS., <https://digital.va.gov/general/oit-releases-new-coronavirus-chatbot> [<https://perma.cc/NV9R-U4PB>] (announcing new chatbot). The VA has since replaced the coronavirus chatbot with a new, general chatbot, which is in the beta testing stage. *VA Chatbot*, U.S. DEP’T OF VETERANS AFFS., <https://www.va.gov/contact-us/virtual-agent> [<https://perma.cc/2L72-XLPA>].

44. *VA Coronavirus Chatbot*, U.S. DEP’T OF VETERANS AFFS., <https://www.va.gov/coronavirus-chatbot> [<https://perma.cc/42GD-ELUM>] (displaying the VA chatbot).

45. *Veterans’ Group Life Insurance (VGLI)*, U.S. DEP’T OF VETERANS AFFS., <https://www.va.gov/life-insurance/options-eligibility/vgli> [<https://perma.cc/>]

VA indicated that the technology effectively helped respond to the dual challenges of a surge in veteran needs and constrained resources by using automation to solve tens of thousands of veteran problems and inquiries in a “human-like” way.⁴⁶ The VA has also introduced “e-VA,” an “artificial intelligence platform providing modern, streamlined and responsive customer service, as well as automating routine administrative activities with your VR&E Vocational Rehabilitation Counselor (VRC) and staff.”⁴⁷ In introducing this technology, the VA stated that “e-VA will reduce [the] time [VRCs and other staff] spen[d] performing routine case management tasks.”⁴⁸ Thus, e-VA (pronounced like the name “Eva”) promises to allow counselors to focus directly on veterans.⁴⁹

Other agencies are also using digital tools to provide automated guidance to the public. For instance, the “What’s Covered” App for Medicare “delivers accurate cost and coverage information right on your mobile device,” allowing users to “quickly see whether Medicare covers their service.”⁵⁰ The Transportation and Security Administration (TSA) has developed “AskTSA,” a messaging tool, in which users can send TSA questions on Facebook or Twitter, which the agency will then answer

Y7JT-34A5] (discussing eligibility, benefits, costs, and other relevant information about VGLD).

46. Jason Miller, *VA Found a Fast Solution to its Growing Call Center Wait-Time Problem*, FED. NEWS NETWORK (Sept. 9, 2020), <https://federalnewsnetwork.com/ask-the-cio/2020/09/va-found-a-fast-solution-to-its-growing-call-center-wait-time-problem> [<https://perma.cc/Z9KT-U82R>] (writing about the implementation of the VA Chatbot).

47. *Introducing VR&E’s e-VA Customer Service Support*, U.S. DEP’T OF VETERANS AFFS. (Sept. 9, 2020) [hereinafter *Introducing e-VA*], <https://content.govdelivery.com/accounts/USVAVBA/bulletins/29d349a> [<https://perma.cc/SK3C-UTWJ>].

48. *Electronic Virtual Assistant (e-VA) Fact Sheet*, U.S. DEP’T OF VETERANS AFFS.: VETERANS BENEFITS ADMIN. (Oct. 2020), <https://benefits.va.gov/BENEFITS/factsheets/vocrehab/e-va.pdf> [<https://perma.cc/RLM7-Y7ET>].

49. See *Introducing e-VA*, *supra* note 47 (stating the reason for developing e-VA was to “improve our service to [veterans]”).

50. *Get Medicare’s New What’s Covered App!*, MEDICARE (Jan. 2019), <https://www.medicare.gov/sites/default/files/2019-01/12035-whats-covered-app.pdf> [<https://perma.cc/64WX-A5MA>] (advertising the app).

through Facebook messages and Tweets.⁵¹ While TSA agents formulate the answers,⁵² the system shares some of the features of more automated counterparts from other agencies, including the broad availability of the answers through the use of digital tools and the provision of accessible, straightforward answers to questions. TSA has indicated that the goal of these tools is to make “getting helpful information as easy as possible.”⁵³

Sometimes these automated guidance tools perform basic, customer service functions. At other times, they engage in more legal guidance-giving. For instance, e-VA automates administrative tasks, such as scheduling and re-scheduling appointments and submitting documentation.⁵⁴ On the other hand, AskUSDA offers legal guidance (such as the applicable regulations and permit information for plant imports), albeit alongside definitely non-legal guidance, such as such as “how long opened salad dressing is good for.”⁵⁵

Agencies’ guidance tools also currently differ in terms of their levels of sophistication. While some of the tools discussed above (such as AskUSDA) are using relatively rudimentary approaches, other agencies are already developing more advanced tools. For instance, Federal Student Aid (FSA), which is an office of the U.S. Department of Education, developed “Aidan,” a virtual assistant that relies on artificial intelligence and natural language processing to answer common questions about federal student aid.⁵⁶ Aidan is currently available on FSA’s website, as well as on its mobile app, and is accessed by clicking on a green

51. *Have a Question? Now You Can Ask TSA on Facebook*, DEP’T OF HOMELAND SEC. (July 7, 2016), <https://www.dhs.gov/blog/2016/07/07/have-question-now-you-can-ask-tsa-facebook> [<https://perma.cc/G9XJ-K5Q6>] (introducing the expansion of AskTSA to Facebook Messenger).

52. *See id.* (providing the basics of how AskTSA works, who is responding to the questions, and when the service is available to “solve traveler problems and answer questions”).

53. *Id.*

54. *VR&E Pilots the Electronic Virtual Assistant (e-VA)*, U.S. DEP’T OF VETERANS AFFS.: NEWS (Apr. 22, 2020), <https://news.va.gov/73853/vre-pilots-electronic-virtual-assistant-e-va> [<https://perma.cc/72US-64YA>] (listing examples of how service members and veterans can utilize e-VA).

55. *See supra* notes 41–42 and accompanying text (summarizing the results provided by AskUSDA to the inquiry, “Can I bring produce back to the United States?”).

56. *Meet Aidan*, FED. STUDENT AID, <https://studentaid.gov/h/aidan> [<https://perma.cc/AE9S-C3GT>].

owl icon.⁵⁷ Aidan is constantly learning and acquiring new skills through continued interactions with users.⁵⁸ FSA keeps a record of conversations with Aidan, which it uses to improve quality and develop new skills.⁵⁹

Aidan answers a wide variety of questions, which reflect the diversity of tasks with which FSA is charged. Many of the questions that Aidan answers are traditional, non-legal, customer service type of questions, such as “What is my account balance?” or “Who is my [loan] servicer?”⁶⁰ However, in light of FSA’s charge to provide the public with information about the federal student loan process,⁶¹ many of the questions Aidan answers are also more substantive and legal. For example, typing “How can I discharge my student loan?” into Aidan causes Aidan to offer an answer,⁶² as well as a linked article on the topic (which provides the same information),⁶³ and related questions that Aidan could answer.⁶⁴

Putting aside the variation between the different automated tools the federal government is using, there is clearly a distinct move by federal agencies to include automated tools of some sort in their suite of communication tools. A series of recent executive orders has dictated that federal agencies should continue to support and develop artificial intelligence, in part to improve government operations.⁶⁵ The General Services Administration

57. *Id.*

58. *Id.*

59. *Id.*

60. *Id.*

61. *About Us*, FED. STUDENT AID, <https://studentaid.gov/about> [<https://perma.cc/88J6-AWD5>].

62. Aidan provided, “Your loan can be discharged only under specific circumstances, such as a school’s closure, false certification of your eligibility to receive a loan, or failure to pay a required loan refund, or your total and permanent disability, bankruptcy, or death.” *Meet Aidan*, *supra* note 56 (Click “I have a different question”; then type: “How can I discharge my student loan?” into the chat box).

63. *In Which Cases Can My Federal Student Loan(s) Be Discharged?*, FED. STUDENT AID, <https://studentaid.gov/help-center/answers/article/in-which-cases-can-federal-student-loans-be-discharged> [<https://perma.cc/4FMV-RS5E>].

64. The related questions included: “[What is the difference between loan forgiveness cancellation and discharge?] . . . [requesting more information on] loan discharge . . . [h]ow do I apply to have my loan(s) discharged?” *Meet Aidan*, *supra* note 56.

65. *See, e.g.*, Exec. Order No. 13,859, 84 Fed. Reg. 3,967 (Feb. 11, 2019), <https://www.govinfo.gov/content/pkg/FR-2019-02-14/pdf/2019-02544.pdf>

(GSA) created the Artificial Intelligence (AI) Center of Excellence (CoE) to support federal government adoption of artificial intelligence “through direct partnerships, enterprise-level transformation, and discovery work.”⁶⁶ One of the ways the AI CoE has suggested that the government can do this is through the use of intelligent chatbots, which, like other AI solutions, can “speed service delivery by automatically resolving routine claims, thus freeing up federal employees to focus on more complex problems that require a human touch.”⁶⁷

These efforts self-consciously mirror a trend in private industry. As we have described in prior work, private industry has engaged in significant development of “chatbots” and “virtual assistants” to respond to customer service inquiries.⁶⁸ While the terms “chatbots” and “virtual assistants” are somewhat malleable, both are conversational interfaces that attempt to automate interactions.⁶⁹ Chatbots can provide answers to queries, but virtual assistants tend to be more intelligent, and can perform additional tasks, such as making an appointment or filling out a form in response to a conversation.⁷⁰ In both cases, private industry has suggested that these automated tools will revolutionize interactions with the public because they are always on, they learn how to respond to inquiries quickly, and they can therefore provide widely accessible answers to common questions.⁷¹

Indeed, some federal agencies have explicitly fashioned the development of their automated legal guidance tools after the private industry. For instance, in introducing Aidan, former Secretary of Education Betsy DeVos explained that “[s]implicity is

[<https://perma.cc/2TS5-FRVB>] (laying a framework to continue American leadership in AI research and development); Exec. Order No. 13,960, 85 Fed. Reg. 78,939 (Dec. 3, 2020), <https://www.govinfo.gov/content/pkg/FR-2020-12-08/pdf/2020-27065.pdf> [<https://perma.cc/6N4E-9CTJ>] (setting forth and elaborating principles regarding federal agency development and use of artificial intelligence).

66. Walch, *supra* note 2.

67. *Id.*

68. Blank & Osofsky, *Automated Legal Guidance*, *supra* note 14, at 197.

69. Naveen Joshi, *Yes, Chatbots and Virtual Assistants Are Different!*, FORBES (Dec. 23, 2018), <https://www.forbes.com/sites/cognitiveworld/2018/12/23/yes-chatbots-and-virtual-assistants-are-different/?sh=706589306d7d> [<https://perma.cc/3AXP-CV98>].

70. *Id.*

71. Blank & Osofsky, *Automated Legal Guidance*, *supra* note 14, at 197.

commonplace in the private sector,” and that FSA needed to completely modernize the way that it interacted with students.⁷² Aidan would play a big role in this revamping because, “[if students] have questions . . . they’ll be able to ask Aidan.”⁷³ The result would be that government financial aid services would have to be “on par with world-class financial firms.”⁷⁴ Likewise, in a panel discussion about Aidan, a representative from FSA explained:

Our financial aid programs are complex, we know it. We have a lot of content on our site . . . and we have to figure out ways . . . to digest that content . . . to make it easy for folks to understand given their experiences with private industry, which is . . . nine out of ten times very simple and straightforward.⁷⁵

Like the federal government, state and local governments have followed the private sector by embracing tools that automate guidance and interactions with the public. This trend has increased significantly since the onset of the pandemic. By June 2020, nearly three quarters of states employed chatbots to address public needs and inquiries.⁷⁶ With catchy names like “Larry,” “Missi,” “Robin,” and “Porter,” many U.S. states created these chatbots in a matter of days to respond to public claims and common questions with a “consistent” set of answers.⁷⁷

As federal agencies, like private entities and state and local governments, increase their use of automated guidance tools, the potential reach of these tools grows exponentially. Once programmed, each tool faces small marginal costs to engage in additional interactions. As a result, unlike customer service agents, who face real limits in their capacity to engage, automated guidance tools have extraordinarily broad reach in terms of the extent to which they can inform and influence the public.⁷⁸

72. U.S. Dep’t of Ed., *Secretary Betsy DeVos Full Remarks at 2019 Federal Student Aid Conference*, YOUTUBE, at 01:59 (Dec. 5, 2019), <https://www.youtube.com/watch?v=gLo2rNjXRyo>.

73. *Id.* at 04:30.

74. *Id.* at 12:14.

75. Digitalgov, *How Chatbots Can Improve Customer Experience*, YOUTUBE, at 54:32 (Mar. 3, 2021), <https://www.youtube.com/watch?v=U0Rk0euqKWw>.

76. Colin Wood, *Nearly 75% of States Launched Chatbots to Aid Pandemic Response*, STATESCOOP (June 26, 2020), <https://statescoop.com/nearly-75-percent-states-launched-chatbots-aid-pandemic-response> [<https://perma.cc/Z9QN-MUC9>].

77. *Id.*

78. See *infra* Part III.A (discussing the benefits and influence of automated legal guidance).

Below, we describe in detail our research regarding two well-developed forms of automated legal guidance currently employed by federal agencies: the U.S. Citizenship Immigration Services' (USCIS) "Emma" and the Internal Revenue Service's (IRS) "Interactive Tax Assistant" (ITA). As we will describe, Emma and ITA are different models of automated legal guidance. Emma is what we refer to as a natural language "sorting" model, whereas ITA is what we refer to as a decision tree "answer" model. Notwithstanding these differences, we found that Emma and ITA feature a critical similarity: their ability to mislead members of the public about how the law will apply in their individual circumstances.

B. EMMA

USCIS has developed Emma, a computer-generated virtual assistant, who answers questions that users have about U.S. immigration.⁷⁹ USCIS is a federal agency within the Department of Homeland Security (DHS) that "administers the nation's lawful immigration system."⁸⁰ Specifically, since 2003, USCIS has been responsible for the "service functions" of the U.S. immigration system, whereas other agencies within DHS (Immigration and Customs Enforcement and Customs and Border Protection) have been responsible for immigration enforcement and border security.⁸¹

USCIS has an enormous service-oriented workload, which it spreads across its more than 19,000 government employees and more than 200 offices around the world.⁸² USCIS has recently estimated that, on an average day, the agency: "[a]djudicate[s] more than 32,500 requests for various immigration benefits"; "[p]rocess[es] 3,700 applications to sponsor relatives and future spouses"; "[a]nalyze[s] nearly 550 tips, leads, cases and detections for potential fraud, public safety and national security concerns"; "[p]rocess[es] refugee applications around the world in support of the refugee admissions ceiling"; "[r]eceive[s] 55,000

79. *Meet Emma, Our Virtual Assistant*, U.S. CITIZENSHIP & IMMIGR. SERVS. (Apr. 13, 2018), <https://www.uscis.gov/tools/meet-emma-our-virtual-assistant> [<https://perma.cc/6PXG-UGRT>].

80. *Mission and Core Values*, U.S. CITIZENSHIP & IMMIGR. SERVS. (Jan. 27, 2023), <https://www.uscis.gov/about-us/mission-and-core-values> [<https://perma.cc/9R6Y-WFJ>].

81. *Our History*, U.S. CITIZENSHIP & IMMIGR. SERVS. (Nov. 18, 2022), <https://www.uscis.gov/about-us/our-history> [<https://perma.cc/8MCZ-PGZA>].

82. *Mission and Core Values*, *supra* note 80.

phone calls to [the] toll-free phone line and more than 150,000 inquiries and service requests via online accounts and digital self-help tools”; among many other tasks.⁸³

Of particular interest in terms of USCIS’s role in guidance-giving, USCIS receives over a million visitor sessions each day to its website.⁸⁴ As this statistic makes clear, USCIS’s digital interactions with the public are a critical part of USCIS fulfilling its service mission. This is consistent with USCIS’s strategic plan, a major platform of which is to provide a “robust digital environment” that “[p]rovides access to ‘the right data at the right time’ to support decision-making processes.”⁸⁵

Within this context, USCIS launched Emma in December of 2015.⁸⁶ Emma was created to offer users an alternative means of accessing information about the immigration process and their immigration status.⁸⁷ One hope was that Emma would alleviate the burden on USCIS call centers, which were, at the time, receiving over one million calls a month.⁸⁸ As USCIS described on Emma’s launch, “Emma was developed in response to a growing interest in self-help tools and to enhance our applicant services. USCIS call centers currently receive many questions concerning general information requests that can be provided through the Web. Now Emma will help provide that information.”⁸⁹

Named after Emma Lazarus, the nineteenth century poet and essayist whose words are inscribed on the base of the Statue of Liberty, USCIS has suggested that the chatbot Emma also

83. *A Day in the Life of USCIS*, U.S. CITIZENSHIP & IMMIGR. SERVS. (Nov. 16, 2022), <https://www.uscis.gov/about-us/a-day-in-the-life-of-uscis> [https://perma.cc/M782-NBDV].

84. *Id.*

85. *2019–2021 Strategic Plan*, U.S. CITIZENSHIP & IMMIGR. SERVS. 15, https://www.uscis.gov/sites/default/files/document/reports/USCIS_Strategic_Plan_2019-2021.pdf [https://perma.cc/DJJ3-ZMSA].

86. Aaron Boyd, *USCIS Virtual Assistant to Offer More ‘Human’ Digital Experience*, FED. TIMES (Nov. 16, 2015), <https://www.federaltimes.com/it-networks/2015/11/16/uscis-virtual-assistant-to-offer-more-human-digital-experience> [https://perma.cc/X5D6-JEQC].

87. *Id.*

88. *Id.* As it turns out, Emma did not yield a substantial reduction in calls to the call center. For further discussion, see *infra* notes 101–02 and accompanying text.

89. *USCIS Launches Virtual Assistant—Emma Gives Customers Another Option for Finding Answers*, U.S. CITIZENSHIP & IMMIGR. SERVS. (Dec. 5, 2015), <https://www.uscis.gov/archive/uscis-launches-virtual-assistant-emma-gives-customers-another-option-for-finding-answers> [https://perma.cc/D2DF-X9LD].

stands ready to serve immigrants, in this case by providing them accessible information about the immigration process.⁹⁰ USCIS has emphasized that Emma answers questions based on your own words; you don't need to know "government speak."⁹¹ In addition to being able to "[p]rovide immediate responses to your questions about all of [USCIS's] services," Emma can "[g]uide you through [USCIS's] website" and "[f]ind information based on the questions and search terms you use."⁹² Emma can type answers in either English or Spanish, and she can speak answers as well (although currently only in English).⁹³ An "Ask Emma" button pops up on USCIS web pages,⁹⁴ and USCIS has widely advertised Emma, including on social media platforms like Facebook and Twitter.⁹⁵

USCIS has reported that Emma has numerous indicia of success. In 2020, USCIS reported that Emma was one of the most widely used chatbots in the U.S. government, having successfully responded to more than 35 million inquiries from more than 11 million users.⁹⁶ USCIS also described Emma as a "very 'highly trafficked' and 'very useful tool for many of our applicants and the general public,' which USCIS rel[ies] on very heavily."⁹⁷ USCIS has also indicated that, by 2020, Emma had a "success rate" of 93% in English and 90% in Spanish, having brought down her "I don't know" responses significantly over

90. *Meet Emma, Our Virtual Assistant*, *supra* note 79.

91. *Id.*

92. *Id.*

93. *Id.*

94. *See, e.g.*, U.S. CITIZENSHIP & IMMIGR. SERVS., <https://www.uscis.gov> [<https://perma.cc/TK6P-XTVN>] (showing USCIS's home page, prominently featuring an Ask Emma box, which indicates: "Hi, I'm Emma. I'm programmed to help you with questions about this site. What would you like to ask me?").

95. *See, e.g.*, USCIS, FACEBOOK (Oct. 31, 2016), https://www.facebook.com/uscis/photos/emma-is-our-virtual-assistant/1322280934449790/?paipv=0&eav=AfZcmhLAEa60pvKCN5buJG40rcLj-O27FxoJP3TCnuVwqW5gnZLf0PZyVrt9WVhzZRc&_rdr [<https://perma.cc/NNF9-NC3L>]; USCIS (@USCIS), TWITTER (Dec. 30, 2020), <https://twitter.com/USCIS/status/1344275632058986497> [<https://perma.cc/RUM2-EF7Q>].

96. Kathleen Walch & Ronald Schmelzer, *AI Today Podcast #25: Emma – Immigration Chatbot: Interview with Courtney Winship*, *US Citizenship & Immigration Service (USCIS)*, AI & DATA TODAY, at 02:46 (Jan. 22, 2020), <https://www.cognilytica.com/2020/01/22/ai-today-podcast-125-emma-immigration-chatbot-interview-with-courtney-winship-us-citizenship-and-immigration-service-uscis> [<https://perma.cc/7KT5-3LJC>].

97. *Id.* at 03:01.

time.⁹⁸ USCIS has described that Emma learns over time by training first with adjudicators and case managers, and then with the public, and that Emma has continued to build her skills.⁹⁹ USCIS has further described that Emma “ha[s] a wonderful team of product owners, including subject matter experts, who take the analysis from her powerful AI pool and use that to make decisions on how to best refine her knowledge-base,” or what can be understood as “human in the loop practice.”¹⁰⁰

However, USCIS has acknowledged that, in some ways, Emma has not met all of USCIS’s goals. In particular, Emma did not substantially reduce call volumes to the call center.¹⁰¹ Rather, Emma seemed to just provide another means of accessing the type of information that users could (and were) accessing through the call centers. As a result, Emma did not appear to facilitate USCIS case workers being re-deployed to more complex questions and away from more standard inquiries.¹⁰² In order to meet this goal, USCIS suggested that authentication tools may have to be used to provide users with more personalized responses.¹⁰³

One issue that has not received any significant government or scholarly analysis is how Emma translates the law for the public. In line with the vision that Emma will provide relatable and accessible information for the public, and will not use “government speak,”¹⁰⁴ Emma tries to offer straightforward, understandable answers to a wide variety of questions. In large

98. *Id.* at 02:56, 03:29.

99. *Id.* at 03:59.

100. Tom Temin, *Federal Drive: Vashon Citizen: USCIS’ New Virtual Assistant Emma Gets Service Award*, FED. NEWS NETWORK, at 01:48 (May 31, 2018), <https://federalnewsnetwork.com/tom-temin-federal-drive/2018/05/vashon-citizen-uscis-new-virtual-assistant-emma-gets-service-award> [<https://perma.cc/ASX9-6ATM>].

101. Walch & Schmelzer, *supra* note 96, at 07:40.

102. *Id.* at 6:58.

103. *Id.* at 9:00. Other parties have raised some questions and concerns about Emma. For instance, Emma appears to be the only government chatbot who not only has a human face, but also an image. One group of researchers has critiqued how, “[a]s a flawless English speaker with the potential to be Anglo-passing, Emma upholds whiteness as the central qualifier in the American nationalist criteria of belonging and citizenship.” Melissa Villa-Nicholas & Miriam E. Sweeney, *Designing the ‘Good Citizen’ Through Latina Identity in USCIS’s Virtual Assistant ‘Emma’*, 20 FEMINIST MEDIA STUD. 909, 918 (2020).

104. *Meet Emma, Our Virtual Assistant*, *supra* note 79.

part, Emma does so by acting as a concierge of sorts, directing users to the right place on the website to answer their queries. In so doing, Emma is a natural language “sorting” model of automated legal guidance. Users can type their questions in their own words, and, through the use of natural language artificial intelligence, Emma attempts to sort through information to offer users the information that is most responsive to their inquiry.

For instance, if a user types into Emma, “Where is my visa?,” Emma will respond, “USCIS offers many different types of visa categories. Please tell me the specific type of visa or visa category you’re interested in learning more about or select from the links below”¹⁰⁵ If, from the visa choices that Emma offers, the user clicks on “K Visa (Fiance Visa),” Emma will open up a webpage titled “Green Card for Fiancé(e) of U.S. Citizen.”¹⁰⁶ This webpage contains extensive information for the user, which is contained in accessible pop out text (with tabs), including information about eligibility for adjustment of status, bars to adjustment, grounds of inadmissibility, how to apply, what to submit (K-1 nonimmigrant applicants), conditional approval, family members, and employment authorization and advance parole documents.¹⁰⁷ It also contains a tab titled “legal reference,” which links users to the applicable statutory, regulatory, and USCIS policy manual provisions.¹⁰⁸

1. Simplifications of Technical Information

By offering users straightforward explanations that are responsive to their queries, automated legal guidance tools often simplify the law, or omit more nuanced discussions or qualifications regarding technical information. For instance, if a user asks, “Where is my Visa?” and clicks on “K Visa (Fiance Visa),” Emma not only opens the webpage “Green Card for Fiancé(e) of U.S. Citizen,” but also provides the following:

The K-visa categories for fiancé(e)s of U.S. citizens and their accompanying minor children (K-1 and K-2 visas) were created to speed up the immigration process for such individuals so they could travel

105. *Meet Emma, Our Virtual Assistant*, *supra* note 79 (Click “Ask Emma”; then type: “Where is my Visa?” in the text box).

106. *Id.*; *Green Card for Fiancé(e) of U.S. Citizen*, U.S. CITIZENSHIP & IMMIGR. SERVS. (Feb. 8, 2018), <https://www.uscis.gov/green-card/green-card-eligibility/green-card-for-fiancee-of-us-citizen> [<https://perma.cc/U9FE-28VD>].

107. *Id.*

108. *Id.*

more quickly to the United States. By allowing a fiancé(e) and his/her accompanying minor children to be admitted to the United States as nonimmigrants, fiancé(e)s can be spared a long separation from their intended spouse, while continuing their processing for an immigrant visa after the marriage takes place.¹⁰⁹

Emma's statement that K-visas were created "to speed up the immigration process" offers users an explanation of the legislative purpose.¹¹⁰ Emma does not cite any sort of legislative history or provide caveats in offering this statement of legislative purpose. Instead, Emma offers a simple, decontextualized statement, which nonetheless may offer hope to users that, if they qualify for K-visas, their immigration process will be speedy (or speedier).

As a technical matter, Emma's statement of purpose simplifies a nuanced issue. In examining the purpose behind a K-visa, the Seventh Circuit concluded that "[t]he purpose of a K visa is to allow fiance(e)s, spouses, and children of citizens to enter the United States temporarily while awaiting permanent visas."¹¹¹ Indeed, in explaining this purpose, the Seventh Circuit emphasized that this temporary allowance is necessary precisely because of the lengthy time—months or years—that it can take for permanent immigrant visas to be processed.¹¹²

It is likely that, in referring to the speed of the immigration process with K-visas, Emma is referring to the speed of getting the K-visas only. It is true that these short-term visas can be issued more quickly than permanent visas.¹¹³ However, this fact does not mean that the immigration process, as a whole, is sped up for recipients of K-visas. Emma could have offered a more precise explanation of K-visas, which emphasized that they may speed up the amount of time it takes to enter the United States, in part because the permanent immigrant visa process will remain lengthy. However, adding this additional detail may have distracted users from the detail they likely cared about most—the wait time until reunification with loved ones in the United States. As a result, Emma sacrificed nuance in the

109. *Meet Emma, Our Virtual Assistant*, *supra* note 79 (Click "Ask Emma"; then type: "Where is my Visa?" in the text box; then click "K Visa (Fiance Visa)").

110. *Id.*

111. *Akram v. Holder*, 721 F.3d 853, 859 (7th Cir. 2013).

112. *Id.* at 855.

113. *Id.*

explanation of K-visas in favor of a more straightforward explanation.¹¹⁴

The simplification at the heart of Emma's explanations may be relatively benign in this case. Users may not have as full of an understanding of the interaction between K-visas and the length of the entire immigrant visa process. But this lack of comprehensive information is also unlikely to mislead users in a material way, or to take positions in conflict with a more nuanced understanding of the law.

2. Answering Questions Too Narrowly

However, in other cases, Emma's simplifications can be more problematic. At times, Emma's attempt to communicate in an easily accessible fashion can also lead to answering a question too narrowly, which may result in a failure to warn users regarding possible negative immigration consequences of their decisions. For instance, imagine that a permanent resident of the United States has a sick relative who needs care in another country. The permanent resident wants to travel abroad to provide the care, which may last up to eight months. However, the permanent resident does not want to jeopardize her immigration status. As a result, the permanent resident visits Emma and types, "Can permanent residents leave the United States for eight months?" Emma will answer the following, in addition to opening the webpage, *International Travel as a Permanent Resident*:

Permanent residents are free to travel outside the United States, and temporary or brief travel (less than 1 year) usually does not affect your permanent resident status. If it is determined, however, that you did not intend to make the United States your permanent home, you will be found to have abandoned your permanent resident status. Generally, in order to travel outside the United States, you must present a passport from your country of citizenship or your refugee travel document to travel to a foreign country. When re-entering the US, you will be required to present your green card. Please see the page I've opened for you or select from the link(s) provided to learn more about foreign country travel document requirements, requirements for re-entering the United States from abroad, and other general information regarding travel abroad as a permanent resident.¹¹⁵

114. Interestingly, the webpage to which Emma refers users does not discuss the impact of K-visas on the speed of immigration process at all. *Green Card for Fiancé(e) of U.S. Citizen*, *supra* note 106.

115. *Meet Emma, Our Virtual Assistant*, *supra* note 79 (Type: "Can permanent residents leave the United States for eight months?").

From this straightforward guidance, the permanent resident may reasonably conclude that she is not risking her immigration status by traveling outside the United States to care for her ailing relative for eight months. However, by offering straightforward guidance regarding the user's permanent residence question without taking into account broader potential ramifications, Emma may fail to warn the user about other potential, and significant, negative immigration consequences.

For instance, while the absence may not jeopardize permanent residence status, it may very well undermine the individual's continuous residence in a way that may interfere with the individual's ability to be naturalized as a U.S. citizen. Naturalization, which is often expected to follow in due course from permanent residence status, confers on the individual significant benefits, such as the ability to vote, to obtain a U.S. passport, to petition for family members, and to receive security against deportation.¹¹⁶ In order to be eligible for naturalization, an individual must have "resided continuously within the United States . . . for a period of at least five years after having been lawfully admitted for permanent residence."¹¹⁷ Critically, absences from the United States between six months and one year "shall disrupt the continuity of such residence . . . unless the applicant can establish otherwise to the satisfaction of the Service. This finding remains valid even if the applicant . . . did not document an abandonment of lawful permanent resident status, and is still considered a lawful permanent resident under immigration laws."¹¹⁸ As a result, if the individual is absent from the United States for eight months to take care of her ailing relative, she may very well have undermined her continuous residence in a way that may disrupt her ability to naturalize.

To be sure, Emma provides links to more details that could alert users to this naturalization issue. When Emma provides the long answer set forth above, indicating that temporary or brief travel (less than one year) usually does not affect permanent resident status, Emma also provides "More Information," which provides links, including a link to *Physical Presence Requirements for Naturalization*.¹¹⁹ If a user clicks on the link, *Physical Presence Requirements for Naturalization*,

116. Elizabeth Carlson, *Handling the Complex Naturalization Process*, 15-06 IMMIGR. BRIEFINGS 1 (2015).

117. 8 C.F.R. § 316.2(a)(3) (2022).

118. 8 C.F.R. § 316.5(c)(1)(i) (2022).

119. *Meet Emma, Our Virtual Assistant*, *supra* note 79.

Emma will provide the following, lengthy discussion of physical presence requirements:

During your application for citizenship, you must prove that you were physically present in the United States. If you are applying as a single applicant, you must have been physically present for at least 30 months of the five-year period preceding your application. If you are applying as the spouse of a U.S. citizen, you must have been physically present for at least 18 months of the three-year period preceding your application. In addition, you must show that you have resided for at least three months immediately before filing your application in the USCIS district or state where you claim to have residency. Also, in addition to the physical presence requirement, there is a separate continuous residence requirement for naturalization. Please see the page that I've opened for more information on this topic.¹²⁰

While the above text would not alert users to any additional concerns about the eight-month absence, there is more concerning information in the additional webpage that Emma opens (which appears underneath the dialogue box). This webpage provides, among other things, that, “[e]xtended absences outside of the U.S. may disrupt an applicant’s continuous residence. Absences of more than six months but less than one year may disrupt an applicant’s continuous residence unless the applicant can prove otherwise”¹²¹ This statement would be significantly more concerning for the traveling permanent resident than the statement that Emma offered. Whereas Emma had indicated that “[p]ermanent residents are free to travel outside the United States, and temporary or brief travel (less than 1 year) usually does not affect your permanent resident status,”¹²² the webpage reverses the presumption, indicating that the eight-month absence may disrupt the

120. *Meet Emma, Our Virtual Assistant*, *supra* note 79 (Type: “Can permanent residents leave the United States for eight months?” in the text box; then click “Physical Presence Requirements for Naturalization”).

121. *Continuous Residence and Physical Presence Requirements for Naturalization*, U.S. CITIZENSHIP & IMMIGR. SERVS. (May 25, 2021) <https://www.uscis.gov/citizenship/continuous-residence-and-physical-presence-requirements-for-naturalization> [<https://perma.cc/S5K7-7D5T>]. A user may also get to this information by reading the text that appears on the webpage *International Travel as a Permanent Resident*, which appears underneath the dialogue box of Emma’s first answer. *International Travel as a Permanent Resident*, U.S. CITIZENSHIP & IMMIGR. SERVS. (Jan. 11, 2018), <https://www.uscis.gov/green-card/after-we-grant-your-green-card/international-travel-as-a-permanent-resident> [<https://perma.cc/Z98T-YX2P>]. However, the text is hidden inside a tab that is labelled “What if my trip abroad will last longer than 1 year?” *Id.* As a result, a user is relatively unlikely to find the text in this way.

122. *Meet Emma, Our Virtual Assistant*, *supra* note 79.

applicant's continuous residence unless the applicant can prove otherwise.¹²³ However, a user would only access this webpage in response to the initial question to Emma by taking several additional steps, including clicking through a link that was not obviously important, and going on to read the webpage that ultimately appeared below Emma's answers, in response to several steps. Many users may simply rely on Emma's initial answer, which seemed to suggest that the contemplated absence would not have a negative effect on the permanent resident's immigration status.

In this case, Emma has answered the user's question too narrowly. The user typed, "Can permanent residents leave the United States for eight months?," a question that did not specify what immigration consequences concerned the user. Rather than broadly considering what possible negative immigration consequences may flow from such an outcome (an approach an attorney might take if asked for advice), Emma categorized the question as one dealing with permanent residency only. As a result, Emma provided the user an answer about the effect of the absence on permanent residence (which may be minimal), without considering broader, negative consequences the individual may face from the absence. Emma's tendency to categorize questions and then respond to those categories may have resulted in a failure to warn the user about significant negative immigration consequences of a decision.

3. Lack of Incorporation of Discretionary Guidance

In other cases, the information Emma provides fails to take into account discretionary guidance, in a way that may disadvantage members of the public. For instance, during the pandemic, many U.S. permanent residents ended up outside the United States for longer than a year for a variety of reasons including, to name a few, because they fled for a safer place to quarantine, because they left to take care of an ailing relative, or because they were simply out of the country for some other reason and could not get back in as a result of pandemic-related travel restrictions.¹²⁴

123. *Continuous Residence and Physical Presence Requirements for Naturalization*, *supra* note 121.

124. Joel Rose, *Permanent Residents Who Left the U.S. During the Pandemic Worry They Can't Come Home*, NPR (July 24, 2021), <https://www.npr.org/2021/07/24/1019423852/permanent-residents-left-u-s-pandemic-return> [https://perma.cc/94FC-ZD56].

Imagine an immunocompromised permanent resident who left the United States to quarantine at a family cabin in Canada.¹²⁵ After being fully vaccinated, the individual wants to return to the United States but is not sure what the impact of the absence was on her immigration status.¹²⁶ As a result, she visits Emma and asks, “Can a permanent resident leave the United States for more than a year?” Emma provides the same response as before, which dictates, in relevant part, that “[p]ermanent residents are free to travel outside the United States, and temporary or brief travel (less than 1 year) usually does not affect your permanent resident status.”¹²⁷ The negative implication, of course, is that an absence of more than one year is problematic, as it may affect the individual’s permanent residence status.

In this case, if the individual reviews the webpage that Emma opens underneath the dialogue box, the user will find even more troubling information. The webpage, *International Travel as a Permanent Resident*, provides, among other things:

If you plan on being absent from the United States for longer than a year, it is advisable to first apply for a reentry permit on Form I-131. Obtaining a reentry permit prior to leaving the United States allows a permanent or conditional permanent resident to apply for admission into the United States during the permit’s validity without the need to obtain a returning resident visa from a U.S. Embassy or Consulate abroad. Please note that it does not guarantee entry into the United States upon your return as you must first be determined to be admissible . . .¹²⁸

The combination of this guidance may cause the permanent resident to fear that she will not be readmitted to the United States when she attempts to cross the border back from Canada to the United States. In some cases, as a result, the individual may not make an attempt to return.

However, the guidance that Emma provides does not account for exercises of discretion. When asked about the matter by a reporter, Aaron Bowker, a public affairs liaison with U.S. Customs and Border Protection, expressed, “What were you

125. This hypothetical is based on one of the stories detailed in the NPR article. *See id.*

126. *Id.*

127. *Meet Emma, Our Virtual Assistant*, *supra* note 79 (Type: “Can a permanent resident leave the United States for more than a year?” in the text box).

128. *International Travel as a Permanent Resident*, *supra* note 121. This text would also appear underneath the dialogue box in response to an inquiry to Emma about being absent eight months. *Id.*

supposed to do if airlines couldn't fly here for six, eight months, right? You couldn't get back here. These are all things we take into consideration when we're readmitting people into the country."¹²⁹ More generally, Bowker explained, "Things are handled on a case-by-case basis. . . . That is really dependent upon the interview with the [U.S. Customs and Border Protection] officer."¹³⁰ By not averring to the potential exercise of discretion by a U.S. Customs and Border Protection officer when a permanent resident has been out of the country for more than a year, Emma may lead some individuals not to try to simply re-enter, even in situations in which discretion may be exercised in their favor.

To be sure, Emma has a difficult task in providing the rule in a situation in which officers may (or may not) exercise discretion. As Bowker elaborated, "It's very hard to paint a blanket brush for everybody saying everything's going to be OK."¹³¹ To the extent that Emma encouraged permanent residents to rely on exercises of discretion, Emma would potentially be giving undue hope, or even leading permanent residents to take overly risky decisions.

However, it is nonetheless instructive to compare the advice a permanent resident gets from accessing Emma with the advice that a permanent resident might receive from an attorney. If the woman who quarantined in Canada consulted an attorney and explained her desire to re-enter the United States, the attorney might provide the general rules about lengths of absences, but also counsel that discretion may be applied in a given case, and advise regarding the nature of the discretion. Instead, Emma is able to provide a responsive answer, which nonetheless may fail to provide the whole story, part of which might affect how a well-informed permanent resident would respond.

C. INTERACTIVE TAX ASSISTANT

In 2008, the IRS created the "Interactive Tax Law Assistant" (ITLA), a new online system that its human customer service representatives, known as "IRS assistors," would use when addressing taxpayer inquiries over the phone.¹³² The

129. Rose, *supra* note 124.

130. *Id.*

131. *Id.*

132. See TREASURY INSPECTOR GEN. FOR TAX ADMIN., 2011-40-043, THE IN-

primary motivation for creating this new internal system was to address inconsistent, even conflicting, responses that had occurred previously when IRS assistors would answer taxpayer questions by consulting printed IRS publications.¹³³ Under this new system, IRS assistors would respond to taxpayer inquiries through the IRS hotline by asking the taxpayer a series of questions that appeared on ITLA and then, after inputting the taxpayers' responses, by reading ITLA's answer to the taxpayer's original question.¹³⁴ The IRS concluded that ITLA significantly improved IRS assistors' responses to taxpayer inquiries in terms of consistency, accuracy, and speed.¹³⁵

Two years later, in 2010, the IRS announced its creation of an external version of its internal ITLA system, which taxpayers could access directly through the IRS website: "Interactive Tax Assistant" (ITA).¹³⁶ The IRS describes ITA as a "tool that provides answers to several tax law questions specific to your individual circumstances."¹³⁷ When taxpayers access ITA through the IRS website, they select a category of questions, such as "Can I Deduct My Medical and Dental Expenses?" and then answer a series of questions provided by ITA.¹³⁸ As the IRS describes ITA, this resource "can determine . . . if the type of income you have is taxable, if you're eligible to claim a credit,

INTERACTIVE TAX LAW ASSISTANT HELPS ASSISTORS PROVIDE ACCURATE ANSWERS TO TAXPAYER INQUIRIES 1, 24 (Apr. 20, 2011), <https://www.treasury.gov/tigta/auditreports/2011reports/201140043fr.pdf> [<https://perma.cc/R57V-34E8>].

133. *Id.* at 4–5.

134. *Id.* at 1.

135. See TREASURY INSPECTOR GEN. FOR TAX ADMIN., 2015-40-032, INTERIM RESULTS OF THE 2015 FILING SEASON 14 (Mar. 31, 2015), <https://www.tigta.gov/sites/default/files/reports/2022-02/201540032fr.pdf> [<https://perma.cc/V6PB-MY7Y>].

136. See *Interactive Tax Assistant (ITA)*, IRS (Sept. 14, 2022), <https://www.irs.gov/help/ita> [<https://perma.cc/S9LX-5E82>]; see also TREASURY INSPECTOR GEN. FOR TAX ADMIN., 2011-40-070, THE INTERNAL REVENUE SERVICE PROVIDES HELPFUL AND ACCURATE TAX LAW ASSISTANCE, BUT TAXPAYERS EXPERIENCE LENGTHY WAIT TIMES TO SPEAK WITH ASSISTORS 15 (July 22, 2011), <https://www.treasury.gov/tigta/auditreports/2011reports/201140070fr.pdf> [<https://perma.cc/8XMX-N3US>] ("The Interactive Tax Assistant, launched in Fiscal Year 2010, provides taxpayers with web access to some of the same tools and knowledge foundation that assistors use internally to answer tax law questions.").

137. *Interactive Tax Assistant (ITA)*, *supra* note 136.

138. See *id.*

[and] if you can deduct expenses [on your tax return].”¹³⁹ Once taxpayers have inputted their responses to a series of questions, ITA presents a screen titled “Answers” (e.g., noting that a specific type of business expense is “not a deductible expense.”).¹⁴⁰ ITA offers taxpayers answers that are tailored to “individual circumstances”¹⁴¹ and that use friendly and accessible language, such as second-person pronouns (e.g., “you” and “your”).¹⁴²

Over the past decade, IRS budget cuts and other events, such as the COVID-19 pandemic, have significantly reduced taxpayer access to IRS human customer service representatives.¹⁴³ In response, the IRS has emphasized that ITA is the resource that taxpayers should turn to for personalized tax guidance. For example, at the close of 2021, the IRS tweeted, “Have a tax law question? Our #IRS Interactive Tax Assistant has answers” and provided taxpayers with a link to ITA.¹⁴⁴ Five years after the launch of ITA, the IRS reported that ITA responded to 660,430 requests for answers to tax law questions, a 168% increase over 2014.¹⁴⁵ According to IRS officials we interviewed, ITA received over five million visits in 2020.¹⁴⁶ These officials explained to us that this traffic was partly attributable to the pandemic and the closure of IRS offices and that, in a more typical year, ITA receives over two-and-a-half million visits from taxpayers.¹⁴⁷

Some of the features of ITA described above distinguish it from Emma. Unlike Emma, ITA does not interpret users’

139. *Id.*

140. *Id.*

141. *Id.*

142. *Id.*

143. See, e.g., David Hood, Allyson Versprille & Kaustuv Basu, *Customer Service at the IRS Is so Bad, Even Tax Pros Are Fed Up*, BLOOMBERG: BUSINESSWEEK (Jan. 4, 2022), <https://www.bloomberg.com/news/articles/2022-01-04/irs-customer-service-is-so-bad-even-tax-preparation-professionals-are-fed-up> [<https://perma.cc/8947-UJGN>]; see TREASURY INSPECTOR GEN. FOR TAX ADMIN., *supra* note 135.

144. IRSnews (@IRSnews), TWITTER (Dec. 26, 2021), <https://twitter.com/IRSnews/status/1475164767929212930> [<https://perma.cc/Q3MT-Q5R4>].

145. See TREASURY INSPECTOR GEN. FOR TAX ADMIN., *supra* note 135.

146. Interview with Interviewee 6 (on file with authors).

147. *Id.*; see also *2021 Annual Report to Congress*, NAT’L TAXPAYER ADVOC. 114 (2021) https://www.taxpayeradvocate.irs.gov/wp-content/uploads/2022/01/ARC21_Full-Report.pdf [<https://perma.cc/G9TH-RBF7>] (reporting 2,736,000 visits to ITA during FY 2020).

natural language and direct them to information. Rather, ITA exerts more control over the information that users input, and offers more definitiveness in its outputs, in the form of “answers” to users’ tax situations.¹⁴⁸ This is what makes ITA a decision tree “answer” model. As of January 2021, ITA contained 55 separate topics, such as “Is the Distribution From My Roth Account Taxable?”; “Do I Need to File a Tax Return?”; and “How Do I Claim My Gambling Winnings and/or Losses?”¹⁴⁹ According to our interviews with IRS officials, the IRS attempts to include topics that are simple enough for ITA to address without the need for lengthy legal analysis or extensive follow-up inquiries.¹⁵⁰

ITA often provides taxpayers with accurate answers to simple questions, such as the deadlines for filing tax returns and the types of forms that taxpayers are required to file.¹⁵¹ However, even though ITA more tightly controls user inputs than Emma, the different models of automated legal guidance share a critical similarity: as ITA attempts to respond to questions that are even slightly more complex, it also presents simplified answers that deviate from the formal tax law. Sometimes these simplifications, if taxpayers followed them, would reduce taxpayers’ tax liability; at other times, if taxpayers followed them, these simplifications would result in consequences that are adverse to taxpayers’ interests. Below we provide brief illustrations of ITA’s responses to taxpayer inquiries that are consistent with tax law, taxpayer-favorable, and taxpayer-unfavorable.

1. Consistent with the Tax Law

ITA often delivers accurate responses to taxpayer questions about simple issues that do not involve complex statutes or regulations or conflicting judicial decisions. For an illustration, imagine a single mother who, in early April 2020, is determining whether she can have additional time to file her individual income tax return, IRS Form 1040. The taxpayer can visit ITA and click on the topic titled, “What Is the Due Date of My Federal

148. See, e.g., *supra* text accompanying note 140.

149. Interview with Interviewee 6, *supra* note 146; see *Interactive Tax Assistant (ITA)*, *supra* note 136.

150. Interview with Interviewee 6, *supra* note 146.

151. See *Interactive Tax Assistant (ITA)*, *supra* note 136.

Tax Return or Am I Eligible to Request an Extension?”¹⁵² ITA then asks the taxpayer a series of questions, including “Do you want to know if you are eligible to request an extension, or are you inquiring about the due date of your return (including any extended due dates)?”¹⁵³ After the taxpayer answers additional questions regarding residency and refund status, ITA informs the taxpayer that, in 2020, both the filing and payment deadlines are automatically extended to July 15, 2020 as a result of the COVID-19 pandemic.¹⁵⁴

As this example demonstrates, for questions involving basic tax compliance issues, such as deadlines, ITA can provide assistance to the taxpayer accurately and efficiently. As soon as the taxpayer responded that she would not be living outside of the U.S. and Puerto Rico on April 15, 2020, ITA provided the deadline for filing and payment.¹⁵⁵ If, on the other hand, the taxpayer had responded that she would be living outside of the country on that date, ITA would have asked a series of follow-up questions regarding the taxpayer’s need for an extension before providing the deadline.¹⁵⁶ In this example, ITA provided the taxpayer with a personalized answer quickly and with information that was consistent with the relevant statutory and administrative authorities.

2. Taxpayer-Favorable Simplifications

When taxpayers ask ITA questions that involve more complex legal issues or implicate specific aspects of taxpayers’ personal situations, ITA can also deliver answers that simplify the tax law in ways that are seemingly favorable to taxpayers.

For an illustrative example, consider a salesperson at a car dealership who is considering pursuing an advanced educational degree, a Master of Business Administration (MBA). The taxpayer plans to pursue the MBA in order to gain business and financial education and take on a managerial role at the car dealership at which he works. The taxpayer considers whether the cost of the MBA would be tax deductible and visits ITA for

152. *What Is the Due Date of My Federal Tax Return or Am I Eligible to Request an Extension?*, I.R.S. (Sept. 7, 2022), <https://www.irs.gov/help/ita/what-is-the-due-date-of-my-federal-tax-return-or-am-i-eligible-to-request-an-extension> [<https://perma.cc/HJ6B-BLKN>].

153. *Id.*

154. *Id.*

155. *Id.*

156. *Id.*

guidance.¹⁵⁷ After selecting the “work-related education expenses” topic, the taxpayer answers several questions, including whether the MBA expenses were necessary to meet “the minimum educational requirements of your trade or business or your employer’s trade or business.”¹⁵⁸ The taxpayer considers the question and responds “no” because he does not believe that holding an MBA degree is an official requirement of managers at the car dealership. After responding to a few additional questions, ITA informs the taxpayer that the work-related education expenses (the MBA expenses) are deductible.¹⁵⁹

While ITA appears to provide the taxpayer with an answer that may allow the taxpayer to claim deductions for MBA tuition and related expenses, the taxpayer may receive a different response from the IRS if an audit occurs. In many cases, the IRS has challenged taxpayers’ attempts to deduct MBA tuition, resulting in both wins and losses for the government.¹⁶⁰ Despite the IRS’s history of challenging taxpayers’ deductions for this expense and the unsettled judicial landscape regarding the issue, ITA provided the taxpayer with an unequivocal “answer” that the MBA tuition expenses are deductible.¹⁶¹ ITA only asked the taxpayer a series of “yes” or “no” questions and did not ask more nuanced questions regarding the taxpayer’s motivation for incurring the education expenses.¹⁶² As a result of its binary questions and lack of investigation of individual facts and circumstances, ITA provided the taxpayer with clear, but potentially inaccurate, guidance.

If the IRS were to audit and challenge the taxpayer’s deductions for MBA tuition, the agency would not be bound by any statements that ITA provided to the taxpayer. As the courts have held, informal administrative guidance, such as statements

157. *Are My Work-Related Education Expenses Deductible?*, I.R.S. (June 2, 2022), <https://www.irs.gov/help/ita/are-my-work-related-education-expenses-deductible> [<https://perma.cc/N6S9-96K2>].

158. *Id.*

159. *Id.*

160. *Compare* Link v. Comm’r, 90 T.C. 460, 463–64 (1988), *aff’d*, 869 F.2d 1491 (6th Cir. 1989) (denying MBA work-related education expense deductions), *and* Schneider v. Comm’r, 47 T.C.M. (CCH) 675 (1983) (same), *with* Allemeier v. Comm’r, 90 T.C.M. (CCH) 197 (2005) (allowing MBA work-related education expense deductions), *and* Sherman v. Comm’r, 36 T.C.M. (CCH) 1191 (1977) (same).

161. *Are My Work-Related Education Expenses Deductible?*, *supra* note 157.

162. *Id.*

made by ITA, cannot alter the meaning of the formal tax law, statutes, and regulations.¹⁶³ The government considers the Internal Revenue Bulletin (IRB), a weekly government publication, as the authoritative instrument of the IRS for announcing official IRS ruling and procedures and for publishing Treasury Decisions and other items.¹⁶⁴ It requires IRS employees to follow any items published in the IRB and informs taxpayers that they may rely on these statements.¹⁶⁵ However, the IRS does not publish statements provided by ITA, or any forms of automated legal guidance, as official statements in the IRB.¹⁶⁶

Further, in the event that the IRS asserted civil tax penalties against the car salesman for deducting MBA tuition expenses as an ordinary and necessary business expense, the taxpayer would face obstacles to taking advantage of potential statutory and regulatory defenses against these penalties. For example, if the IRS were to assert a tax penalty against the taxpayer for an underpayment attributable to negligence, the taxpayer might attempt to claim that he had a “reasonable basis” for claiming the deduction.¹⁶⁷ However, to assert this defense, the taxpayer must demonstrate that he reasonably relied upon a statement from a source included on an exclusive list of potential authorities, which does not include ITA, the IRS website, or other forms of automated legal guidance.¹⁶⁸

163. See, e.g., *Miller v. Comm’r*, 114 T.C. 184, 194–95 (2000); *United States v. Josephberg*, 562 F.3d 478, 498–99 (2d Cir. 2009); *Carpenter v. United States*, 495 F.2d 175, 184 (5th Cir. 1974); *Adler v. Comm’r*, 330 F.2d 91, 93 (9th Cir. 1964); *Zimmerman v. Comm’r*, 71 T.C. 367, 371 (1978), *aff’d*, 614 F.2d 1294 (2d Cir. 1979); *Johnson v. Comm’r*, 620 F.2d 153, 155 (7th Cir. 1980) (per curiam).

164. See Memorandum from Michael W. Damasiewicz, Dir., Examination—Field & Campus Pol’y, Dep’t of the Treasury, I.R.S., Interim Guidance on Use of Frequently Asked Questions (FAQs) and Other Items Posted to IRS.gov (May 18, 2017) (on file with authors).

165. *Id.*

166. See Kristin E. Hickman, *IRB Guidance: The No Man’s Land of Tax Code Interpretation*, 2009 MICH. ST. L. REV. 239, 240 (2009) (noting the most common IRB documents “are revenue rulings, revenue procedures, and notices”); Leslie Book, *Giving Taxpayer Rights a Seat at the Table*, 91 TEMP. L. REV. 759, 768 (2019) (“[G]uidance documents in the IRB include revenue rulings, revenue procedures, . . . and Office of Chief Counsel notices.”).

167. Treas. Reg. § 1.6662-3(b)(3) (as amended in 2003).

168. *Id.* (stating the reasonable basis standard will generally be satisfied if “a return position is reasonably based on one or more of the authorities set forth in § 1.6662-4(d)(3)(iii)”).

Throughout our analysis of ITA's topics, we observed several additional examples of taxpayer-favorable statements of the tax law, which deviate from the underlying formal law. ITA provides seemingly favorable answers to taxpayer inquiries involving the deductibility of medical expenses (such as those related to artificial teeth¹⁶⁹ and lead paint removal costs¹⁷⁰) and business expenses (such as expenses related to clothing¹⁷¹). As we have argued previously, the Code, Regulations, and caselaw often reach different, less taxpayer-favorable results.¹⁷² Each of these examples involve taxpayer inquiries about law that is complex or unsettled or where the answer hinges on issues that are unique to the facts and circumstances of the taxpayer's situation.

3. Taxpayer-Unfavorable Simplifications

In addition to providing taxpayers with answers that simplify the law in ways that are taxpayer-favorable, ITA can also present guidance that simplifies the tax law in ways that, if followed by taxpayers, would result in less favorable tax consequences.

A frequent example of taxpayer-unfavorable simplifications occurs where ITA provides an answer to a taxpayer inquiry that does not incorporate potential statutory or administrative exceptions. For instance, consider a high school competitive swimmer who receives a swimming scholarship to a university with an NCAA Division I swim team. The student receives a scholarship offer letter from the university that states that the student will receive the scholarship as long as she is eligible to participate in swim meets, including by meeting all physical fitness and health requirements. The letter also states that the students may be required to participate in fundraising and promotional events throughout the academic year. The student's parents visit ITA to learn whether they must report their daughter's swimming scholarship as taxable income. When they visit ITA and select the topic involving academic scholarships, fellowships and grants,¹⁷³ they encounter a question from ITA that asks about

169. See Blank & Osofsky, *Automated Legal Guidance*, *supra* note 14, at 210–11.

170. See *id.* at 211–12.

171. See *id.* at 212–14.

172. See *id.* at 214–17.

173. Interactive Tax Assistant, *Do I Include My Scholarship, Fellowship, or Education Grant as Income on My Tax Return?*, I.R.S. (June 2, 2022),

the extent to which the scholarship was “payment for services” that the student was required to perform as “a condition of receiving the scholarship.”¹⁷⁴ After considering the university’s requirement that their daughter participate in swim meets and fundraising events, the parents select “All” in response to this question.¹⁷⁵ After the parents answer additional questions, ITA states, “Your Scholarship, Fellowship or Grant is taxable,” because it “was received for services you were required to perform.”¹⁷⁶

Like the other examples described above, the response from ITA is clear and simple. Yet it may also be inconsistent with the applicable tax law. The IRS has considered whether athletic scholarships that required participation in competitions are “qualified scholarships,” which are excluded from gross income.¹⁷⁷ In Revenue Ruling 77-263, the IRS stated that an athletic scholarship is not taxable as long as it is not cancelled “in the event the student cannot participate,” including due to events such as injury or ill health.¹⁷⁸ Despite this guidance, and the judicial decisions it references, ITA did not ask any questions of the parents regarding the substantive terms of their daughter’s scholarship. Instead, ITA only inquired whether the taxpayer received the scholarship “for services.”¹⁷⁹ Consequently, if the parents followed the guidance offered by ITA as a result of their responses, ITA could have influenced their decision to report the scholarship as taxable income, even though they could have had legal grounds for excluding it.

As we have documented, ITA often provides simplified answers that deviate from the formal tax law in ways that are contrary to taxpayers’ interests.¹⁸⁰ In some cases, ITA states that taxpayers are required to include income, such as scholarships and other grants, that may be excludable under the formal tax

<https://www.irs.gov/help/ita/do-i-include-my-scholarship-fellowship-or-education-grant-as-income-on-my-tax-return> [<https://perma.cc/56VC-2PVW>].

174. *Id.*

175. *Id.*

176. *Id.*

177. See Rev. Rul. 77-263, 1977-2 C.B. 47. For further discussion, see Richard Schmalbeck & Lawrence Zelenak, *The NCAA and the IRS: Life at the Intersection of College Sports and the Federal Income Tax*, 92 S. CAL. L. REV. 1087, 1125 (2019).

178. Rev. Rul. 77-263, 1977-2 C.B. 47.

179. Interactive Tax Assistant, *supra* note 173.

180. See Blank & Osofsky, *Automated Legal Guidance*, *supra* note 14, at 210–17.

law.¹⁸¹ At other times, ITA provides answers that state that taxpayers may not claim deductions for certain medical expenses and charitable contributions, even though the underlying tax law appears to support deductibility.¹⁸²

D. SUMMARY

As this discussion illustrates, federal government agencies are using automated tools to communicate the law to the public. These tools, which are being extensively used by some federal agencies, and are in development or in more nascent stages in other federal agencies, have the potential to increase the reach of federal agencies' digital guidance efforts.

Automated legal guidance tools can answer questions from the general public about the law in a straightforward fashion. Ideally, their ability to do so provides useful guidance to the public while also freeing up constrained agency resources, thereby allowing agency officials to focus on more difficult inquiries. However, as we have illustrated through numerous examples, these tools can also systematically create problematic divergences from a more comprehensive view of the law. This can occur in either a natural language "sorting" model or in a decision tree "answer" model. We have shown how, in some cases, these answers may advantage users; in other cases, the answers may disadvantage them.

We should emphasize that the examples that we identified in this Part are merely that—examples. Many more examples may be identified, which underscore a broader phenomenon: in attempting to offer straightforward answers to the public, automated legal guidance tools often only offer part of a more complex story. Sometimes, the answers that these tools provide will fit the question exactly and provide all the information relevant to the inquiry, or may be close enough, in that they do not mislead users in a material way. However, other times, automated tools will fail to provide a comprehensive answer in a way that is more problematic. They may abbreviate the legal requirements or offer overly simplistic summaries. They may categorize the question and respond with answers that fit in that category, while failing to identify a deeper or broader legal issue. They may engage in other simplifications that make the advice tractable, but misleading. These deviations are critical because

181. *Id.* at 215–16.

182. *Id.* at 214–15, 216–17.

they are inherent to automated legal guidance. The very goal of providing straightforward responses to legal inquiries necessitates deviations from the law when the law itself is not straightforward. Moreover, the more effective the automated legal guidance tools are in encouraging users to follow their guidance, the more they may amplify these deviations from the formal law.¹⁸³

II. INTERVIEWS WITH FEDERAL AGENCY OFFICIALS

To gain additional insight into the development of federal automated legal guidance, in the Fall of 2021 we met with federal agency officials for semi-structured interviews. With the help of officials at the Administrative Conference of the United States (ACUS), an independent federal agency, we secured interviews with agency officials who have direct or supervisory responsibility for automated legal guidance tools. We spoke with individuals who were responsible for the technology specifically, or knowledgeable about the guidance process generally as it related to the automated guidance tools, or both. While we endeavored to speak with agency officials both at agencies with well-developed automated legal guidance tools (namely, USCIS, IRS, and FSA) as well as those without, we were only able to secure interviews with those agencies with well-developed automated legal guidance tools. We also spoke with several individuals from the General Services Administration (GSA) who have supported the development of automated legal guidance tools by federal agencies. These interviews, in particular the interviews with GSA officials, confirmed for us that, at present, USCIS, IRS, and FSA have the most well-developed automated legal guidance tools, but also that many federal agencies are currently contemplating adopting automated legal guidance tools, and that experts expect this technology to grow increasingly common over time. In total, we conducted ten interviews. The interviews covered a range of questions, from how and why a tool was developed, to what feedback and evaluation is undertaken, to how the agency makes decisions about how to present complicated legal information in an accessible fashion, to how the guidance offered by automated legal guidance tools relates to agency guidance generally, among other topics.

183. Blank & Osofsky, *Automated Legal Guidance*, *supra* note 14, at 217–22.

From our interviews, we learned that agency officials working with automated legal guidance are not adequately apprised of some of the issues we identified from our own research regarding automated legal guidance. For instance, some agencies favored usability of the product, but at the cost of potentially obscuring some of the ways that the guidance may deviate from formal law. This approach was motivated by a belief that users had little ability, or inclination, to read complex material, particularly in the context of automated guidance. As a result, agency officials believed that automated guidance needed to offer answers that were as simple as possible. Across the board, we found limited evaluation by agencies, with feedback focused on customer usability, not fundamental questions about how the guidance dovetails with the underlying law. We also heard little concern by agencies regarding the ways that their guidance may be a poor fit in a given circumstance for the question asked, or ways in which users may be relying on the guidance despite agency beliefs that the guidance should not create user reliance. And we found that no federal agency publishes an archive of changes made to their automated tools' questions and answers, and none appears to have plans to do so in the future.

We also learned about different models that exist in different agencies for developing automated legal guidance, and we learned what agency officials see as the successes and problems with their automated legal guidance tools. For instance, we heard about different models for developing and overseeing the guidance within agencies, and we confirmed our findings regarding differences between natural language "sorting" models and decision tree "answer" models. We also learned that agencies view high user numbers as indicative of success, but, at least in some cases, they view the lack of reduced question traffic elsewhere within the agency as a problem. Below, we highlight major themes from our interviews.

A. MODELS FOR DEVELOPMENT AND COORDINATION WITHIN AGENCIES

The basic technological platform for an automated legal guidance tool is available through several outside vendors or contractors. At present, federal agencies often acquire the basic technology from one of these outside companies, rather than developing the technology through in-house resources. The agency then works with the outside vendor to input the appropriate content (i.e., questions and answers) and to refine the technology for

the desired user experience. All agency officials with whom we spoke stressed that strict government protocols regarding privacy and accessibility are followed when working with an outside vendor.

While working with an outside vendor seemed commonplace, agencies differed in how they coordinated and allocated work on the technology within the agency. In some cases, the team of agency officials who work on the product may be relatively small, relying heavily on centralized agency development of guidance. In this model, the technology may be under the direction of a “product owner,” or a key person who is accountable for the technology. Along with other individuals, that product owner will work with other teams within the agency (such as the content or policy team) to populate the technology with information and keep it updated. While the process for populating and updating the information in the technology seemed to vary by agency, any content that was inputted into the technology generally had to be cleared centrally, or by agency counsel. Sometimes, the content might be available centrally within the agency, and this centrally available content would then be disseminated and used in a variety of channels, such as on the federal agency’s website, by the agency’s chatbot, and, potentially, even by the agency’s call center.

It was not always clear to us who was responsible for monitoring the law for any changes that might implicate the automated legal guidance tool. There were many different people and groups that we heard about who might be involved in updates and changes, including, for instance, the product owner, the policy team, the content team, a chief operating officer, content specialists, counsel, working groups, a design team, and a communication team, among others. However, there was nonetheless some general understanding that content or area specialists were responsible for monitoring any updates that needed to be made, and that these changes would be pushed out to all the appropriate channels, including on a chatbot, on the website, and other locations. As one agency official summarized, “there’s different methods of intake, but at a very high level we make sure that the appropriate teams are consulted before we publish any content out in the public space.”¹⁸⁴ Another agency official conceded that “I think it’s easier when there’s an active change. I think what’s harder for us is when we put out guidance that

184. Interview with Interviewee 1 (on file with authors).

maybe gets outdated but there hasn't been really proactive statutory change."¹⁸⁵ This interviewee also stressed that change to guidance could come about in a number of different ways, including from a program office (or office responsible for administering a particular program), but that changes were passed through many different groups, including counsel.

Even under this centralized guidance model, the product owner or team responsible for the automated legal guidance tool might suggest that particular modifications be made to the centrally created agency guidance (which changes would then have to be approved through various chains of authority). Such modifications might be made to make the content more appropriate for users' expectations regarding readability on an automated legal guidance tool (a topic discussed in further detail below). The overall expectation remained that the team responsible for the automated legal guidance tool was not creating content from scratch. Rather, the team was working from centrally created models, which were being used and applied in other ways in the agency as well.

An alternative model that we observed involved more autonomous development of the content used by the automated legal guidance tool. In this model, a larger team may be dedicated to the automated legal guidance tool, and this team may develop material that is unique for this technology. As a result, the content on this technology may differ from content available elsewhere, including through the call center. Counsel would still be heavily involved in vetting any content developed by this team. Indeed, the development of content for this tool is a laborious and lengthy process, in part because the content has to be newly created specifically for this tool. Under this model, rather than updates being pushed through to the technology from some sort of central agency process, the team responsible for the technology is itself responsible for monitoring the law and proposing any changes to the content, which would then be approved by counsel and, once approved, integrated into the automated legal guidance tool.

B. USABILITY OF GUIDANCE

Agency officials across the board stressed that a goal of offering information through an automated legal guidance tool is to make complex information usable by the public.

185. Interview with Interviewee 3 (on file with authors).

One agency official noted that, through testing of the technology, the agency learned that “people don’t read and they don’t want a lot of content.”¹⁸⁶ So, the agency focused on providing a “super concise” answer that is really “high level,” along with a link that might go into details if they want to access it.¹⁸⁷ The conciseness of the answers is particularly important because, if the agency put all the requirements that applied in a chat bubble, “most people likely are not going to read it.”¹⁸⁸

Indeed, another agency official indicated that “we have the data to present to show that we can not only say, we think that they don’t read, we know that.”¹⁸⁹ This data included usability tests, in which the agency would provide an answer to a question and then the user would follow up and ask the question that was provided in the answer.¹⁹⁰ It also included feedback from users, who complained that the agency providing too much content had a negative impact on users, rather than “trying to solve their problems.”¹⁹¹ This sort of feedback required the agency to “cut down on the number of words so that users don’t feel overwhelmed by that kind of content.”¹⁹²

At least one agency official attributed users’ expectations in this regard to their experience with other platforms, like Twitter, which provide “short, quick information.”¹⁹³ Another agency official explained that this struggle mirrored the difficulties the agency has with issuing guidance generally, in that:

[O]n the one hand, you want that information disclosed . . . and on the other hand, the more disclosures we have, the more people don’t read them and they get overwhelmed by the amount of paperwork so there’s kind of a pendulum on that, where one administration will add a lot of these disclosures and then next question will take them away and come back again.¹⁹⁴

In the context of automated legal guidance tools, agencies seemed to place a premium on particularly concise answers, in light of user expectations for this sort of platform.

186. Interview with Interviewee 1, *supra* note 184.

187. *Id.*

188. *Id.*

189. Interview with Interviewee 2 (on file with authors).

190. *Id.*

191. *Id.*

192. *Id.*

193. Interview with Interviewee 1, *supra* note 184.

194. Interview with Interviewee 3, *supra* note 185.

C. CONTROL OF ANSWERS BY AGENCY

While machine learning and other sophisticated forms of artificial intelligence can allow technology to develop more accurate or sophisticated responses at least somewhat autonomously, all agency officials with whom we spoke indicated that, currently, this more sophisticated artificial intelligence is not used to offer guidance to the public through an automated legal guidance tool. Indeed, many agency officials stressed that, in developing these tools to offer guidance to the public, the agencies need to be sure that all of the information the technology offered was authoritative and correct. As a result, at present, these tools are not developing their own responses to questions. Rather, all questions and responses are vetted within appropriate agency channels. One individual with whom we spoke indicated that this approach was consistent with the pressure on federal agencies to get the answers right, and agencies' accompanying reluctance to employ technologies that might impose risk.

D. DIFFERENCES IN INPUTS AND OUTPUTS OFFERED

Consistent with our own observations, we also heard about different models for the inputs and outputs for automated legal guidance tools. As we described previously, in one model, as with Emma, the goal of the automated tool is to assess what topic area a user is asking about by analyzing the user's natural language, and then direct the user to the relevant information about that topic area.¹⁹⁵ While the particular information should be responsive to the user's inquiry, it does not attempt to provide a personalized answer. Conversely, as with ITA, another automated tool model controls the information that users enter by offering a series of prompts with set response options, and then provides an "answer."

In agencies that adopted the first model, agency officials emphasized that their tools did not tell users what to do. For instance, one agency official explained:

[I]f you look across social media and how we engage with customers, we don't typically tell users how to act. We provide tools that can help them make decisions, but there is never a case where you will see [the tool] tell users they are eligible. We will provide the information / the criteria for eligibility, but we never actually provide a personalized response in this regard. . . . Ultimately our content is somewhat neutral in that regard.¹⁹⁶

195. See *supra* Part I.A.

196. Interview with Interviewee 2, *supra* note 189.

Agency officials who employed the first model also emphasized that the information that their tool provided was just that—mere information—and definitely not law. One agency official emphasized, “At no time does our [tool] provide any legal advice.”¹⁹⁷

Instead, the tool merely provided “information about the . . . process.”

E. THE INFORMATION IS CORRECT

Regardless of differences in the types of answers offered by different agencies, agency officials were in general agreement as to the high confidence in the correctness of the responses given, as a result of the intensive vetting process applied for all questions and answers. One agency official explained, “none of the content itself could ever be inaccurate. It’s just a matter of . . . they didn’t give the answer that the user would want But again, we never produce content that isn’t approved so it just might not be the right topic area . . . when it’s marked inaccurate.”¹⁹⁸

F. PEOPLE DO NOT / CANNOT RELY ON IT / NO ARCHIVING

Perhaps most interestingly, some agency officials with whom we spoke suggested that users did not actually rely upon the information provided by their tools. The explanation was that the tool only offered general information. If a user actually wanted to take a legal position, the user would have to take additional steps, such as filling out a form, and only undergoing that additional process would constitute reliance on agency guidance. One agency official explained:

[The tool] provides accurate information based on our policy and our guidance. . . . It is not saying, hey, this is something that we tell you that is specifically for you and it is a binding agreement. . . . The work that we do, it is mostly providing validated information to the user around any questions . . . we are just providing information that you already have available on the website.¹⁹⁹

However, when asked, the same agency official indicated that there are no general disclaimers that tell users that the information they get is not binding, or not something that users can rely upon. Instead, the agency “stand[s] by our internal process, first and foremost, to push out and publicize the content

197. Interview with Interviewee 4 (on file with authors).

198. Interview with Interviewee 2, *supra* note 189.

199. Interview with Interviewee 1, *supra* note 184.

that we put on our site. . . . [The tool] is not providing new information that is not already accessible or available on the website.”²⁰⁰

Other agency officials did not stress as strongly that users did not, in fact, rely upon the information given by automated legal guidance tools, but all agreed that, as a matter of law, users *could not*, in fact, rely upon such tools. This was true even for forms of the technology that provided more personalized “answers” to users. Guidance from such tools is not considered to be the type of “published” guidance that would support a legal reliance argument.

Dovetailing with these beliefs that users would not, and, in any event, could not, rely on the automated legal guidance, in all cases, the agencies with whom we spoke indicated that their tools do not provide publicly accessible archives of old answers, for which users can identify an answer that was given on a prior date. Agencies sometimes indicated that, internally, there would be an archive of old authority. But none of the agency officials believed that an archive of questions and answers that were supplied on a prior date was available to the public, at least not on the automated legal guidance tool itself.

G. EVALUATION METHODS

We heard about a variety of methods for evaluating an agency’s automated legal guidance tool. One agency stressed that internal metrics were used to evaluate whether the answer given was the answer the user would have wanted. This same agency stressed that the tool was not capable of giving a “wrong” answer, because all the answers had been internally vetted. Rather, the internal metrics were designed to determine whether the tool accurately matched the answer to the question the user would have wanted, based on the question that the user was asking. Agencies often surveyed the users themselves about their experience, asking about usability, and whether the tool provided the answer that the user had been seeking.

For tools whose goal it was to navigate users to the relevant information in response to a user’s query, lowering the tool’s “I don’t know” rate was also an important form of evaluation. Agency officials would analyze the tool’s “I don’t know” rate, determine when the tool was often giving an “I don’t know” re-

200. *Id.*

sponse, and attempt to reduce the “I don’t know” response by offering additional information when necessary. Reducing the “I don’t know” rate over time is an important measure of success.

In general, the agency officials we interviewed explained that the feedback users provided was often “technical,” such as suggestions about being able to more easily use the interface. Generally, agencies reported positive feedback from users, who appreciated the additional assistance.

H. SUCCESSES AND CHALLENGES

When we asked interviewees about successes and challenges that they had experienced with their automated tools, we often heard that the tools had succeeded in expanding service to the public, offering 24/7 answers in an agile way. Agency officials pointed to significant increases in user base over time as indication of the success of the product and favorable ratings of the tools by users. Challenges included having enough resources to provide users all the answers they wanted, and to maintain the product adequately over time.

All of the agencies employing automated legal guidance tools emphasized that the type of information that the tool could provide was limited, relative to other available options within the agency. In one agency, the call center could answer a much wider variety of questions. In another agency, there are various “tiers” of responses that can be offered. Actual agency officers are at a higher “tier” and can answer more complicated questions. As a result of a combination of resource constraints and constraints regarding the type of information that can be offered in an automated, non-authenticated environment, the automated legal guidance tools currently can only address limited questions and can only provide a limited number of responses. Nonetheless, our interviewees uniformly believed that the tools were a positive addition to the ways that the agencies can interact with, and respond to, public queries.

III. THE BENEFITS AND COSTS OF AUTOMATED LEGAL GUIDANCE

The automated legal guidance tools currently hosted by federal agencies offer an inexpensive way to help the public navigate through complex legal regimes. However, automated legal guidance also exacerbates the tendency of federal agencies to present complex law as though it is simple without actually engaging in simplification of the underlying law. Moreover, we

found that agency officials are not adequately apprised of the potential costs and drawbacks of their automated legal guidance tools, causing them, in some cases, to make the potential problems worse, for instance by failing to adequately notify members of the public about the limitations of automated legal guidance.

As an initial matter, the automated legal guidance tools currently hosted by federal agencies all share a common characteristic that we have described as “simplicity.”²⁰¹ As we have theorized in prior work, simplicity occurs when the government offers clear and simple explanations of the law without highlighting its underlying complexity or reducing this complexity through formal legal changes.²⁰² Simplicity, by contrast, occurs when policymakers reform the law by eliminating specific complex provisions or procedures through enactment of statutory changes or issuance of regulations.²⁰³ When government agencies communicate the law in ways that exhibit simplicity, they present complex law as clear rules, but do not actually simplify the underlying formal law.

While simplicity appears in many federal agency communications with the public,²⁰⁴ in some ways the automation of legal guidance tends to intensify its use. As our interviewees explained to us, the demand to make guidance seem straightforward and simple becomes even more stringent with automated legal guidance, relative to printed publications. With automated legal guidance, agency officials feel under pressure to offer “super concise” content that is really “high level” because “people don’t read and they don’t want a lot of content.”²⁰⁵ While some of these pressures exist with guidance generally,²⁰⁶ at least one interviewee expressed that the automated format heightens these tendencies because of user experience with other digital platforms, like Twitter, which provide “short, quick information.”²⁰⁷ As simplicity, as well as its dissemination, increases in automated legal guidance, so too can its effects.

201. See Joshua D. Blank & Leigh Osofsky, *Simplicity: Plain Language and the Tax Law*, 66 EMORY L.J. 189, 205–07 (2017).

202. See *id.*

203. See *id.*

204. See *id.* (describing the use of simplicity in static IRS publications).

205. *Supra* text accompanying notes 186–92.

206. *Supra* text accompanying note 194.

207. *Supra* text accompanying note 193.

A. BENEFITS

As we discuss below, automated legal guidance presents significant potential benefits to both the public and the government.

1. Administrative Efficiency

At the outset, we acknowledge that federal agencies face tremendous pressure to assist members of the public in their attempts to comply with the law. They must provide the public with “plain language” explanations and instructions regarding complex law, even as some of these agencies have diminished resources, in terms of available funding and labor.²⁰⁸ Automated legal guidance makes it possible for federal agencies to provide users with responses to inquiries, in a manner that is faster and less costly than would occur with human customer service representatives.²⁰⁹

When users consult automated tools offered by federal agencies, such as Emma and ITA, the users input information in response to questions and receive seemingly personalized responses.²¹⁰ Behavioral research shows that personalized statements can have a greater impact on recipients’ beliefs and actions than generic publications.²¹¹ Online advertisers, political campaign consultants, and telemarketers often deploy second-person pronouns because they “enhance consumer involvement and brand attitude as a result of increasing the extent that consumers engage in self-referencing.”²¹² By requiring users to input personal information, such as their own immigration status or adjusted gross income, and responding with personalized language, agencies use automated tools to convince users that these responses directly address their inquiries.

208. See *supra* notes 3–4 and accompanying text.

209. See, e.g., Aakrit Vaish, *Five Reasons Why Chatbots Are the Future of Customer Service*, ENTREPRENEUR (Jan. 5, 2019), <https://www.entrepreneur.com/article/325830> [<https://perma.cc/D2KT-XNQM>]; *AI for Customer Service*, IBM, <https://www.ibm.com/watson/ai-customer-service> [<https://perma.cc/S4TP-HQ8B>].

210. See *supra* Parts I.B, I.C & I.D.

211. See, e.g., Ryan E. Cruz, James M. Leonhardt & Todd Pezzuti, *Second Person Pronouns Enhance Consumer Involvement and Brand Attitude*, 39 J. INTERACTIVE MKTG. 104, 104 (2017); Navdeep S. Sahni, S. Christian Wheeler & Pradeep Chintagunta, *Personalization in Email Marketing: The Role of Noninformative Advertising Content*, 37 MKTG. SCI. 236, 240 (2018) (discussing the impacts of personalized statements in marketing).

212. Cruz et al., *supra* note 211.

The second significant administrative benefit of automated legal guidance is that it can deliver information more immediately than either printed summaries or human customer service reps. For example, when users start the process of submitting information to ITA, the initial screen provides an “estimated completion time” for each question.²¹³ For questions about basic topics, such as filing dates, the estimate is less than ten minutes, and for more complex topics, such as the deductibility of dental expenses, the estimate is fifteen minutes.²¹⁴ In this regard, federal agencies’ automated tools often emulate the speed and efficiency with which private sector chatbots deliver information to customers.

In contrast, taxpayers face significant difficulty getting guidance from other IRS sources. For instance, static IRS publications may be hundreds of pages in length and require readers to consider numerous exceptions, requirements, and examples.²¹⁵ Taxpayers who seek answers instead from human customer service reps face different, but also formidable, barriers. In 2021, IRS customer service reps answered only eleven percent of the calls they received.²¹⁶ Wait times for the calls that were answered were an average of twenty minutes, though many taxpayers just gave up on waiting.²¹⁷ Indeed, the difficulty in reaching IRS human customer service reps has become so great that some taxpayers have taken to hiring companies to repeatedly call the IRS until they can actually get through, further exacerbating access difficulties for other callers.²¹⁸ The IRS has explicitly endorsed significantly expanded automated guidance as a way to respond to these barriers in accessing human customer service reps.²¹⁹

213. See *Interactive Tax Assistant (ITA)*, *supra* note 136 (providing an estimated completion time of fifteen minutes for the question: “Can I Deduct My Medical and Dental Expenses?”).

214. *Id.*

215. See, e.g., I.R.S., DEPT OF THE TREASURY, PUBL’N NO. 17, YOUR FEDERAL INCOME TAX (2021), <https://www.irs.gov/pub/irs-prior/p17--2021.pdf> [<https://perma.cc/64ET-R6BG>].

216. NAT’L TAXPAYER ADVOC., *supra* note 147, at 66.

217. Michelle Singletary, *If You Call the IRS There’s Only a 1-in-50 Chance You’ll Reach a Human Being*, WASH. POST (Apr. 23, 2021), <https://www.washingtonpost.com/business/2021/04/23/irs-1040-hotline> [<https://perma.cc/TTZ4-3758>].

218. NAT’L TAXPAYER ADVOC., *supra* note 147, at 69.

219. See, e.g., I.R.S., DEPT OF THE TREASURY, PUBL’N NO. 5426, TAXPAYER

2. Complex Law in Plain Language

When automated legal guidance describes the formal law accurately, it can help users understand complex rules and procedures as they exist in the underlying formal law. These tools can enable users to interpret and apply complex formal law to achieve practical ends, such as filing a tax return, applying for a Green Card, or requesting a discharge of federal student loan debt. Moreover, automated tools can also streamline the inquiry process for third parties, such as accountants, lawyers, and other advisors, who may be assisting users with their legal compliance obligations.

Another communication advantage of automated legal guidance tools is that they tend to offer non-qualified answers in response to users' inquiries.²²⁰ For instance, if a user selects "artificial teeth" from the list of possibilities under medical and dental expenses in ITA, the virtual assistant responds with a non-qualified statement that the expense is deductible.²²¹ ITA delivers a simple description of complex law by omitting discussion of exceptions and requirements contained in statutes and regulations, such as that in order to qualify for deductibility, expenses incurred related to artificial teeth must be "necessary to ameliorate a deformity arising from, or directly related to, a congenital abnormality, a personal injury resulting from an accident or trauma, or disfiguring disease."²²² Of course, a drawback to this simple approach is that the user does not receive information about additional statutory or regulatory requirements she must satisfy in order to claim a medical expense deduction. Yet by providing users with non-qualified "answers" to their inquiries, automated legal guidance tools simplify the law enough to enable users to pursue action.

3. Agency Interpretation of Law

A final benefit of automated legal guidance is that it reveals agencies' views of the formal law to members of the public and their advisors. Even though statements made by automated

FIRST ACT: REPORT TO CONGRESS 47 (2021), <https://www.irs.gov/pub/irs-pdf/p5426.pdf> [<https://perma.cc/F3HR-WKUC>] (promoting IRS development of an AI powered chatbot that will answer taxpayers' questions or direct them to the right resources); NAT'L TAXPAYER ADVOC., *supra* note 147, at 76.

220. See Blank & Osofsky, *Automated Legal Guidance*, *supra* note 14.

221. *Interactive Tax Assistant (ITA)*, *supra* note 136.

222. I.R.C. § 213(d)(9).

tools are not binding legal authorities, they offer users an advance view of the how an agency would likely respond to a specific action or position during the audit and/or litigation process.²²³ The simplified descriptions of the law that automated legal guidance presents to users can be characterized as illuminating agencies' interpretations of unsettled legal issues.

In addition, automated legal guidance can also help ensure that agencies administer the law consistently. Some scholars have argued that agencies function more effectively "when central officials can advise responsible bureaucrats how they should apply agency law."²²⁴ Rather than empowering individual human customer service representatives to issue varying, potentially conflicting, interpretations of the law through the help lines by phone, agencies can use automated legal guidance tools to ensure that all users receive the same responses to common inquiries.

B. COSTS

While automated legal guidance can offer administrative benefits for both the government and the public, it also can present simplifications that deviate from the formal law.²²⁵ We found that agencies are insufficiently attuned to ways that automated legal guidance can create such simplifications; the ways that users may rely upon them; and the potential, resulting inequitable benefits and burdens among different users.

223. Taxpayers cannot rely on these statements as binding legal authority. See *Adler v. Comm'r*, 330 F.2d 91, 93 (9th Cir. 1964); *Miller v. Comm'r*, 114 T.C. 184, 195 (2000); *Zimmerman v. Comm'r*, 71 T.C. 367, 371 (1978), *aff'd*, 614 F.2d 1294 (2d Cir. 1979).

224. Peter L. Strauss, *Publication Rules in the Rulemaking Spectrum: Assuring Proper Respect for an Essential Element*, 53 ADMIN. L. REV. 803, 808 (2001).

225. So, too, can private companies that offer automated legal guidance to customers. See, e.g., DONOTPAY, <https://donotpay.com> [<https://perma.cc/C4SA-2AUG>] (presenting the self-proclaimed "world's first robot lawyer"). In some ways, these private services can present some of the same issues as government-offered automated legal guidance (in terms of deviations from the underlying law). However, there are also many differences when the advice is offered by the government versus being offered by a private party (much as there are many different administrative law and values issues when an agency makes a statement versus having a lawyer offer advice to a private client). Considering these differences, this Article sets aside issues associated with privately offered guidance, which may merit examination in future work.

1. Deviation from Formal Law

Automated legal guidance can deliver answers to users that are consistent with the law, but it can also provide guidance that deviates from the law, in ways both subtle and significant. As we have shown, automated legal guidance tools sometimes portray unsettled formal law as unambiguous, add administrative gloss to the formal law, and omit discussion of statutory and regulatory exceptions and requirements.²²⁶ In these cases, automated tools can present users with descriptions of the law that deviate from the statutes that Congress enacted, regulations that agencies have adopted, or doctrine that judges have articulated. The effect of this dynamic is that automated legal guidance may, paradoxically, *diminish* users' knowledge of the formal law.

Deviation from the formal law implicates essential features of democracy: the public's ability to debate the formal law and to hold the government accountable for its laws and actions.²²⁷ First, when government agencies use automated legal guidance tools to simplify complex statutory law or unsettled caselaw to help members of the public comply with the law, public debate regarding the law may emerge from an artificial foundation of certainty and clarity. For example, in the tax context, Congress appears to have deliberately included ambiguous requirements regarding medical expense deductions to allow courts to consider individual cases.²²⁸ Yet, ITA provides unambiguous answers in response to certain inquiries regarding medical expense deductions.²²⁹ Second, automated legal guidance tools may contribute to the public's unwillingness to challenge the government for enacting overly complex or vague rules. By presenting the law as clear and simple, automated legal guidance tools create an end-run around public review and challenge of the actions of Congress and federal agencies.

226. See, e.g., *supra* Parts I.C & I.D.

227. See, e.g., Letter from Thomas Jefferson to Charles Yancey (Jan. 6, 1816), <https://founders.archives.gov/documents/Jefferson/03-09-02-0209> [<https://perma.cc/B8GK-EH6A>] (“[I]f a nation expects to be ignorant & free, in a state of civilisation, it expects what never was & never will be.”); see also JOHN RAWLS, A THEORY OF JUSTICE 14–15 (rev. ed. 1999) (theorizing that justice is the product of a social contract between individuals and government); Frederick Schauer, *Transparency in Three Dimensions*, 2011 U. ILL. L. REV. 1339, 1343 (emphasizing, in the abstract, the importance of government transparency).

228. See I.R.C. § 213(a).

229. See Blank & Osofsky, *Automated Legal Guidance*, *supra* note 14, at 229 (contrasting vague statutory deductions for medical care with specific ITA advice).

From an administrative law perspective, there are limited opportunities for the public to hold agencies accountable for providing guidance to the public that conflicts with the formal law. In administrative law, the notice-and-comment procedures are used to ensure accountability, in addition to transparency and non-arbitrariness, of federal government agencies as they promulgate legislative rules.²³⁰ Legislative rules include agency statements of law that can bind both the agency and the public.²³¹ It is often challenging to distinguish legislative rules, which formally bind both the agency and the public, from interpretative statements about the law that are not subject to notice-and-comment requirements.²³² In any event, the automated legal guidance tools we studied did not go through notice-and-comment requirements. Yet, many users are likely to follow statements made by automated legal guidance. We found that agencies were insufficiently attentive to this reliance, believing that because users *shouldn't* be bound by automated legal guidance, that they were not, in fact relying on it. There was a significant, unrecognized tension between agencies' promotion of automated legal guidance and the belief that users could not, and were not, relying on the information it provided.

2. Lack of Notice to Users

Without reform, automated legal guidance tools often provide little, if any, notice to users regarding the formal laws upon which they rely, changes to their questions and answers that agencies may have made, and the limited legal authority of these tools.

First, automated legal guidance often portrays the law as unambiguous through its clear and simple answers. For example, as discussed earlier, Emma may lead some non-citizen users

230. See, e.g., Shu-Yi Oei & Leigh Osofsky, *Legislation and Comment: The Making of the § 199A Regulations*, 69 EMORY L.J. 209, 220–21 (2019).

231. See, e.g., *Chrysler Corp. v. Brown*, 441 U.S. 281, 295 (1979) (“It has been established in a variety of contexts that properly promulgated, substantive agency regulations have the ‘force and effect of law.’”); Michael Asimow, *Non-legislative Rulemaking and Regulatory Reform*, 1985 DUKE L.J. 381, 383 (describing legislative rules as “new law that completes an incomplete legislative design”).

232. 5 U.S.C. § 553 (requiring notice-and-comment rulemaking for legislative rules but exempting interpretative rules); see also *Cnty. Nutrition Inst. v. Young*, 818 F.2d 943, 946 (D.C. Cir. 1987) (noting the difficulty in distinguishing between legislative and interpretative rules).

to believe that they can leave the United States for personal reasons and return without risking their residency status within the United States.²³³ When automated legal guidance tools answer users' questions quickly, they do not provide users with notice of the formal law upon which these answers are based. Further, they do not signal to users that the formal law in the area of inquiry may be the subject of conflicting judicial decisions. While some of the automated legal guidance tools we reviewed contain introductory disclaimers regarding the formal law,²³⁴ none offer citations to support law or signal to users that the formal law is unsettled.

Second, when federal agencies revise questions and answers provided by its automated legal guidance tools, they do not provide notice to the user of these changes or their effective dates. Compared to static, printed publications, it is very difficult to determine when an agency has made changes to any aspects of its automated legal guidance tools.²³⁵ For instance, when users visit ITA, most of the fifty-five topics require users to respond to over a dozen questions before receiving an answer to the initial inquiry.²³⁶ When the agency makes changes to any of the questions or answers, the IRS does not announce these changes through either ITA or the IRS website. By contrast, when the Treasury Department issues final regulations, it describes changes made to prior proposed regulations.²³⁷

Finally, automated legal guidance tools hosted by federal agencies lack adequate warnings to users regarding reliance on their statements to bind the government or defend against penalties for noncompliance. Some automated legal guidance tools, such as ITA, provide users with an initial disclaimer that informs them that its answers are not "written advice."²³⁸ However, ITA does not contain a similar warning that states that users cannot rely on statements provided by ITA to bind the IRS

233. See *supra* notes 115–31 and accompanying text (describing the potential pitfalls of relying on the Ask Emma virtual assistant).

234. See, e.g., *Interactive Tax Assistant (ITA)*, *supra* note 136.

235. See Blank & Osofsky, *Automated Legal Guidance*, *supra* note 14; *Objectives Report to Congress: Fiscal Year 2021*, NAT'L TAXPAYER ADVOC. 48 n.3 (June 2021), https://www.taxpayeradvocate.irs.gov/wp-content/uploads/2020/08/JRC21_FullReport.pdf [<https://perma.cc/852E-FQQS>] (discussing the distribution of comprehensive IRS guidance).

236. *Interactive Tax Assistant (ITA)*, *supra* note 136.

237. See, e.g., T.D. 9655, 2014-9 I.R.B. 541, 541–42.

238. *Interactive Tax Assistant (ITA)*, *supra* note 136.

or that they cannot rely on statements it provides to assert certain tax penalty defenses, such as the “reasonable basis” defense.²³⁹ Other tools, such as the Federal Student Aid’s Aidan, do not present the user with any disclaimer regarding the advice that it offers through its chat function.²⁴⁰ The lack of adequate warnings may provide users with a false sense of confidence that they can rely upon the answers that these tools provide.

3. Equal Access to Justice

Without reform, automated legal guidance may aggravate inequities in access to the law that different types of individuals enjoy based on their wealth, income, and other statuses. Most people lack access to the formal law, such as statutes, regulations, and case law, as it is nearly impossible for non-lawyers and other experts to understand.²⁴¹ To fulfill their compliance obligations, most people rely on informal law, including automated legal guidance offered by federal agencies. On the other hand, high-income, wealthy individuals, and well-connected individuals can access the formal law by hiring lawyers who engage in extensive planning and consultations of the formal law.²⁴² The two tiers of informal and formal law threaten equitable access to justice for several reasons.

239. See Treas. Reg. § 1.6662-4(d)(3)(iii) (as amended in 2003).

240. *Meet Aidan*, *supra* note 56.

241. See Blank & Osofsky, *The Inequity of Informal Guidance*, *supra* note 14; see also *The Justice Gap: Measuring the Unmet Civil Legal needs of Low-income Americans*, LEGAL SERVS. CORP. 13 (June 2017), <https://www.lsc.gov/sites/default/files/images/TheJusticeGap-FullReport.pdf> [<https://perma.cc/8HRW-GU3W>] (finding that many vulnerable Americans do not seek legal help due to a lack of information about the law or where to go for help); Rebecca L. Sandefur, *Accessing Justice in the Contemporary USA: Findings from the Community Needs and Services Study*, AM. BAR FOUND. 3 (Aug. 8, 2014), https://www.americanbarfoundation.org/uploads/cms/documents/sandefur_accessing_justice_in_the_contemporary_usa_aug_2014.pdf [<https://perma.cc/H366-F8NU>] (noting that vulnerable communities often may not know that the issues they are confronting have a legal component); Sara Sternberg Greene, *Race, Class, and Access to Civil Justice*, 101 IOWA L. REV. 1263, 1298 (2016) (reporting that survey respondents experienced “confusion, fear, and shame” when dealing with courts and lawyers).

242. See, e.g., Jesse Drucker & Danny Hakim, *Private Inequity: How a Powerful Industry Conquered the Tax System*, N.Y. TIMES (June 12, 2021), <https://www.nytimes.com/2021/06/12/business/private-equity-taxes.html> [<https://perma.cc/MX68-4QLP>].

As we have documented, in some cases where the law is unsettled, complex, or ambiguous, federal agencies may adopt interpretations that are favorable to the government in its use of automated legal guidance tools.²⁴³ As a practical matter, individuals who lack access to legal counsel will follow the guidance that government automated legal guidance tools provide. They may follow this guidance even if doing so is contrary to their own financial interests.²⁴⁴ By contrast, where the formal law is ambiguous, individuals and businesses who have access to sophisticated advisors are far less likely to follow guidance that is favorable to the government position.²⁴⁵

Further, unlike the formal law, automated legal guidance does not bind federal agencies to take positions during audits, challenges, and litigation that are consistent with statements expressed by automated legal guidance tools.²⁴⁶ Only formal law, such as statutes, regulations, and case law, has the force of law and is binding on federal agencies.²⁴⁷ Yet formal law is often available only to individuals who can afford legal counsel.²⁴⁸

Last, in some cases, automated legal guidance, like other types of informal law, does not enable users to claim defenses

243. See *supra* Part I.C.3 (hypothesizing a scenario where taxpayers, relying on ITA advice, report income as taxable that could be excluded).

244. See *supra* Part I.C.3 (hypothesizing a scenario where taxpayers, relying on ITA advice, report income as taxable that could be excluded).

245. See Blank & Osofsky, *The Inequity of Informal Guidance*, *supra* note 14, at 1097.

246. See, e.g., *Miller v. Comm'r*, 114 T.C. 184, 194–95 (2000).

247. See, e.g., *Miller*, 114 T.C. at 194–95 (“Unfortunately, the fact that an IRS publication is unclear or inaccurate does not help the taxpayer. . . . Administrative guidance contained in IRS publications is not binding on the Government, nor can it change the plain meaning of tax statutes.”); *United States v. Josephberg*, 562 F.3d 478, 498 (2d Cir. 2009) (stating that the only authoritative sources for the IRS are statutes, regulations, and judicial decisions); *Carpenter v. United States*, 495 F.2d 175, 184 (5th Cir. 1974) (“But nonetheless it is for Congress and the courts . . . not the Treasury to declare the law applicable in a given situation.”); *Adler v. Comm'r*, 330 F.2d 91, 93 (9th Cir. 1964) (“No[] . . . interpretation by taxpayers of the language used in government pamphlets act as an estoppel against the government.”); *Zimmerman v. Comm'r*, 71 T.C. 367, 371 (1978), *aff'd* *Zimmerman v. Comm'r*, 614 F.2d 1294 (2d Cir. 1979) (“[T]he authoritative source of Federal Tax law are in the statutes, regulations, and judicial decisions and not . . . informal publications.”); *Johnson v. Comm'r*, 620 F.2d 153, 155 (7th Cir. 1980) (holding that a plaintiff “may not rely on informal I.R.S. publication” to make a legal claim).

248. See Blank & Osofsky, *The Inequality of Informal Guidance*, *supra* note 14, at 1097.

against penalties for noncompliance.²⁴⁹ However, individuals who can access formal law with the assistance of counsel may be able to use statements in these sources to establish penalty defenses.²⁵⁰ These individuals may also have the resources necessary to pay for written opinions from legal counsel in order to avoid imposition of certain civil penalties for noncompliance.²⁵¹

Together, these dynamics systematically disadvantage individuals who rely more on informal law, relative to formal law.²⁵² When the informal law discourages individuals from claiming benefits or positions to which they are entitled, there will typically be no government challenge that will apprise them of their lost benefits. The taxpayer who does not claim a tax deduction to which she was arguably entitled, or the immigrant who does not try to re-enter the United States even though discretion may have been granted in his favor, has lost an important government benefit. In contrast, when informal law encourages individuals to claim benefits or positions that are arguably too advantageous, relative to the formal law, the individual may very well be challenged by the government (for instance, on audit, or as part of a review of immigration status).²⁵³ As detailed above, the informal law will offer little protection as part of that challenge, relative to protection that might have been available based on reliance on formal law.

Automated legal guidance concentrates these dynamics. While the “super concise”²⁵⁴ guidance offered by automated legal guidance may be able to reach more people, it also significantly increases the need for simplicity and thus has the tendency to create even larger deviations from the formal law.²⁵⁵ Other features of automated legal guidance that likewise make it more

249. See *supra* notes 157–68 and accompanying text.

250. See Treas. Reg. § 1.6664-4(c)(1) (as amended in 2003).

251. For discussion, see Heather M. Field, *Tax Lawyers as Tax Insurance*, 60 WM. & MARY L. REV. 2111, 2121 (2019) (discussing how a transactional tax lawyer may “render a formal tax opinion of the tax consequences” of noncompliance).

252. See Blank & Osofsky, *The Inequality of Formal Guidance*, *supra* note 14, at 1126 (describing, for example, how informal tax law sometimes construes ambiguous formal law to the disadvantage of taxpayers).

253. See *id.* at 1101 (discussing disparities in the auditing process).

254. *Supra* text accompanying notes 186–92.

255. See, e.g., Blank & Osofsky, *Automated Legal Guidance*, *supra* note 14, at 209–17 (comparing “[t]axpayer-[f]avorable [d]eviations” from formal law with “[t]axpayer-[a]dverse [d]eviations” from formal law).

likely to be used also make potential deviations more significant.²⁵⁶ As automated legal guidance offers advice that appears personalized, it is more likely to influence users.²⁵⁷ This feature, combined with the fact that the advice is instantaneous,²⁵⁸ and is relatively decontextualized,²⁵⁹ makes users less likely to turn to other places for guidance. And, relative to talking to an agency official on the telephone, automated legal guidance at present has less capacity to elevate users to a higher tier of authority when appropriate based on the circumstances that apply.²⁶⁰ Automated legal guidance thereby subtly, but in a variety of ways, encourages users, on a potentially large scale, to follow guidance that may be unduly disadvantageous or expose users to legal risk.

C. EVALUATING BENEFITS AND COSTS

Automated legal guidance tools reflect a trade-off between federal agencies representing the law accurately and presenting it in accessible and understandable terms. As we observed in this study, automated legal guidance tools enable agencies to reach more members of the public and provide them quick and easy explanations of the law.²⁶¹ However, as our study also revealed, these quick and easy explanations sometimes obscure what the law actually is. Moreover, automated legal guidance tends to encourage reliance on simplicity in agency explanations to the public, thereby enhancing both the benefits and costs of simplicity.²⁶² In these ways, many of the benefits of automated legal guidance are double-edged. The extreme conciseness, seeming personalization, lack of broader context, and instantaneous responses make automated legal guidance a particularly usable and likely to be used form of guidance. But these same features also make it more likely that users will miss legal nuances.

Critically, our study revealed that agencies seem insufficiently attuned to this tradeoff. In particular, agency officials

256. *See id.* at 203–04 (describing examples of automated legal guidance and how they impact accuracy).

257. *Supra* text accompanying notes 210–12.

258. Blank & Osofsky, *Automated Legal Guidance*, *supra* note 14, at 221–22.

259. *Id.* at 219–21 (describing several example inquiries with results that are “removed from the broader legal context”).

260. *Supra* Part II.H.

261. *Supra* Part III.A.

262. *See supra* Parts III.A & III.B.

failed to adequately appreciate the ways that automated legal guidance affects users and how it can obscure what the law actually is in the process. As for the first point, we were struck by agency officials' views that users were not relying on the guidance or, alternatively, that users should not rely on such guidance, despite heavy user traffic to the guidance tool. As we described, some agency officials believed that users did not actually rely upon the information provided by their tools because the automated legal guidance is "just providing information that you already have available on the website."²⁶³

As to the second point, we were struck by agency officials' beliefs that it was not possible for the automated legal guidance to be "wrong." As we explained in our findings above, one agency official stressed that the agency's automated legal guidance tool was not capable of giving a "wrong" answer, because all the answers had been internally vetted.²⁶⁴ Likewise, agency officials were in general agreement about the correctness of the responses provided by their automated legal guidance tools. One agency official even went so far as to explain, "none of the content itself could ever be inaccurate. It's just a matter of did, they didn't give the answer that the user would want basically to answer the question"²⁶⁵

This combination of believing that automated legal guidance would have little influence (despite responding to millions of user inquiries), and that it was not possible for automated legal guidance to mislead users about the law or how it applies to users' particular circumstances, explains some of the other issues we identified with the automated legal guidance. For instance, these beliefs help explain the lack of adequate disclosure to users regarding inability to rely on the guidance, the lack of evaluation methods designed to identify ways that descriptions of the law might be misleading users with unique circumstances, the failure to archive guidance when it changed, and the failure to provide users with a record of the information that they received from the automated legal guidance.

D. APPRECIATING TRADEOFFS, RELATIVE TO ALTERNATIVES

It is important to emphasize that automated legal guidance is not uniquely problematic, relative to alternative systems of

263. Interview with Interviewee 1, *supra* note 184.

264. *Supra* Part II.G.

265. Interview with Interviewee 2, *supra* note 189.

communicating the law, but it does present distinct costs and benefits. Automated legal guidance is one solution to a difficult problem: the need for the law to address complex problems combined with the public's lack of ability or inclination to understand a complex legal system. There are other potential solutions to this problem, each of which presents their own tradeoffs. Indeed, we could imagine potential solutions along a spectrum. At one end, we could have a very simple legal system. This system would be easier for the public to understand, and it would not present the same issues (such as democratic and equitable problems) with presenting the law as simpler than it really is. However, a simpler legal system would also be less capable of targeting benefits and costs to the right individuals, which itself may undermine equity and other goals the legal system would like to accomplish.²⁶⁶ At the other end of the spectrum, we could imagine a complex legal system that the government simply does not try to explain to the public. For instance, sophisticated artificial intelligence could be used to simply impose the law on members of the public. This system would be better capable of targeting the right benefits and costs to specific individuals, but there would be significant democratic concerns with a legal system the government cannot explain.²⁶⁷ Having a complex legal system explained in simple terms, including through the use of automated legal guidance, is one point along the spectrum.

Relative to alternatives, the central tradeoff for automated legal guidance is that it cannot adequately describe how complex law applies to each individual's circumstances. Instead, it flattens out the complexity, and even intensifies the effects of simplicity through its use as compared to other forms of legal guidance that are less easy to transmit to the public. At worst, automated legal guidance threatens to systematically discourage the most vulnerable members of the public from taking benefits to which they are entitled. While many members of the public may have the resources or wherewithal to access other forms of legal advice, the costs of automated legal guidance will tend to

266. See generally Louis Kaplow, *A Model of the Optimal Complexity of Legal Rules*, 11 J.L. ECON. & ORG. 150 (1995) (exploring the accuracy/complexity tradeoff).

267. See, e.g., Karl Manheim & Lyric Kaplan, *Artificial Intelligence: Risks to Privacy and Democracy*, 21 YALE J.L. & TECH. 106, 111 (2019) (internal footnote omitted) ("The opacity of AI 'black box' decision-making is the antithesis of democratic self-governance and due process in that they preclude AI outputs from being tested against constitutional norms.").

be borne to the greatest extent by those members of the public who use it as their first and last stop in understanding the legal system.

At present, agency officials are not adequately apprised of this tradeoff. Significant design choices are being made, such as the choice to present users with “answers” in a decision tree answer model, or to picture the automated legal guidance as a person (in the case of “Emma”) without consideration of how these choices are influencing public views regarding the law. As such, the federal government has a responsibility to more seriously consider how its choices to explain the law may affect public behavior, especially when the communication method necessarily involves deviations from the underlying legal rules. As one example, failure to realize how automated legal guidance can mislead members of the public about how the law applies in their circumstances may cause agencies to fail to apprise the public of its limits and may cause agencies to fail to robustly evaluate such guidance outside of just relying on user experience surveys. Additionally, failure to appreciate the tradeoffs of automated legal guidance reduces the ability to consider when its use is appropriate relative to alternative approaches. In this regard, understanding automated legal guidance and its attendant tradeoffs is not only relevant when agencies choose to use automated legal guidance. Rather, understanding the costs and benefits of this approach, relative to others, is central to the more general task of designing and communicating a legal system.

IV. RECOMMENDATIONS FOR FEDERAL AGENCIES

As this Article has demonstrated, automated legal guidance often magnifies the tendency of federal agencies to present complex law as though it is simple without actually engaging in simplification of the underlying law. While this approach offers advantages in terms of administrative efficiency and ease of use by the public, it also causes the government to present the law as simpler than it is, leading to less precise advice and potentially inaccurate legal positions. Moreover, federal agencies are currently not adequately apprised of these issues, leading to practices that in some ways make the problems worse. This Part presents detailed policy recommendations for agencies that have adopted, or may adopt, automated legal guidance tools to communicate the law to the public. We have organized our recommendations into five categories: (a) transparency; (b) reliance;

(c) disclaimers; (d) process; and (e) accessibility, inclusion, and equity.²⁶⁸

A. TRANSPARENCY

1. Agencies Should Notify Users When Formal Law Is Contrary to Automated Legal Guidance or Is Unsettled

Agencies should provide users of their automated tools with notice when the relevant formal law is either unsettled or is in conflict with statements made by these tools. Where possible, agencies should include citations or links to conflicting formal law sources, such as judicial decisions with which the agency disagrees. Further, in such situations, agencies could program automated tools to present the government-favorable position by default, along with explicit warnings regarding conflicting or unsettled formal law.²⁶⁹

Notice of unsettled or conflicting law would allow users to make informed planning decisions that are appropriate to their risk tolerance levels. For example, an individual who wants to adopt the most conservative position possible regarding any issue that could affect the ability to become a naturalized U.S. citizen would follow the guidance offered by automated tools such as Emma, even if Emma provides a warning that there are judicial decisions in conflict with its advice.²⁷⁰ As an alternative example, if an individual who is considering whether to claim a tax deduction receives a warning from ITA regarding conflicting formal law authorities, the individual might investigate the issue further by consulting with an accountant or lawyer.²⁷¹ One concern that this recommendation raises is that the inclusion of warnings regarding formal law could diminish the usability of automated legal guidance. However, rather than include lengthy

268. On June 16, 2022, the ACUS Assembly adopted twenty policy recommendations based on our report on automated legal guidance at federal agencies. *See Automated Legal Guidance at Federal Agencies*, *supra* note 36. The recommendations presented in this Article reflect our own positions, which are not necessarily those of ACUS or any of its members.

269. Agencies currently adopt this approach in other forms of guidance. For example, when the IRS issued a revenue ruling regarding deductibility of home equity indebtedness, the IRS noted that its position was in conflict with decisions of the U.S. Tax Court. *See Rev. Rul. 2010-25*, 2010-44 I.R.B. 572 (concluding that the IRS would not follow the reasoning of two U.S. Tax Court decisions).

270. *See supra* notes 128–30 and accompanying text.

271. *See supra* notes 157–66 and accompanying text.

discussion, agencies could include a brief, clear warning notice and, where possible, hyperlinks to specific cases. Agencies have demonstrated that they can provide such brief notice on their websites and in print publications.²⁷²

2. Agencies Should Create and Maintain a Publicly Accessible Archive That Shows an Explanation of Changes to Statements Made by Automated Legal Guidance Tools

When agencies make changes to statements provided by automated legal guidance, they should maintain a publicly accessible record of such changes. Throughout our review, we learned that agencies have different processes for making revisions in response to changes in the formal law, such as new legislation, judicial decisions, or changes in agency positions.²⁷³ However, we did not observe any instances where agencies have created a mechanism for informing the public of these revisions or maintaining a searchable archive on their websites. In response to criticism from taxpayer and practitioners, the IRS has recently committed to create an archive of certain frequently asked questions (FAQs) on its website.²⁷⁴ Agencies should adopt this approach regarding statements made by automated legal guidance tools.

Publicly accessible archives of changes would promote fairness and government transparency. As agencies revise questions and answers provided by automated legal guidance, users may receive different responses to the same inquiry depending on the time of their visits. In the event of a subsequent challenge by the agency, these users cannot access the statement they originally received from the automated tool in situations where the agency subsequently made revisions, due to the lack of a publicly accessible archive of changes.

272. *See, e.g.*, I.R.S., DEP'T OF THE TREASURY, PUBL'N NO. 17, YOUR FEDERAL INCOME TAX (2009) (using a caution symbol of an exclamation point inside a triangle to indicate an instance where the law is unsettled).

273. *See supra* Part II.A.

274. *See* I.R.S. News Release IR-2021-202 (Oct. 15, 2021), <https://www.irs.gov/newsroom/irs-updates-process-for-frequently-asked-questions-on-new-tax-legislation-and-addresses-reliance-concerns> [<https://perma.cc/5W7S-Q8CD>].

3. Agencies Should Include Effective Dates on Statements Made by Automated Legal Guidance Tools

Similarly, when agencies use automated legal guidance tools to deliver information to users, they should include effective dates for the information provided. Throughout our study, we did not observe any instances in which agencies' automated tools informed users of the effective dates of the information provided. This approach stands in stark contrast to the manner in which formal law sources are drafted—such as statutes, regulations, and rulings—which all contain effective dates.²⁷⁵ For example, at the conclusion of a chat session with a user, an agency's automated legal guidance tool should include a brief statement such as “This information is effective as of [date].”

Effective dates serve several important functions. First, they provide information to users about a specific time period.²⁷⁶ Second, if agencies create publicly searchable archives of statements made by its automated tools, the effective dates would allow users to review how the agency changed statements made by these tools over time in response to legislative, judicial, and other developments. Last, if users could rely on statements made by automated legal guidance tools to either bind the agency or defend against penalties for noncompliance (issues we discuss in subsequent recommendations),²⁷⁷ then the inclusion of effective dates of statements made by these tools would become crucial information for users, agencies, and, potentially, courts.

4. Where Agencies Use Decision Tree Structure in Automated Legal Guidance Tools, Agencies Should Publish Content of the Entire Decision Tree

As we have documented, agencies adopt different approaches to designing automated legal guidance tools. For example, the IRS's ITA reflects a decision tree approach to assisting users. For every topic within ITA, the tool provides the same responses to every inquiry, varying only based upon users' inputs

275. See, e.g., I.R.S. Treas. Dec., IRM 32.1.1.2.5 (Aug. 2, 2018) (noting that every Treasury Decision “must state the . . . effective date for the change made” to the regulation).

276. For example, some users who visit ITA may submit inquiries about prior years, not just the current year. See *Interactive Tax Assistant (ITA)*, *supra* note 136.

277. See *infra* Parts IV.B.1 & IV.B.2.

when answering a uniform set of questions from ITA.²⁷⁸ Automated tools that use machine learning, on the other hand, deliver different responses to users' questions over time as they discover patterns.²⁷⁹

In the interest of transparency, agencies that adopt decision tree structures when implementing automated legal guidance should publish the entire content of such decision trees. Public disclosure of the decision tree would provide an immediate and comprehensive source of guidance to users who seek to learn the agency's views on legal issues that may vary depending upon the circumstances. The current approach requires users to provide alternative inputs (e.g., answering "yes" or "no" to specific questions) rather than allowing them to view the full set of possible agency positions at once.²⁸⁰ Further, public disclosure of the decision tree would facilitate public scrutiny of the questions and answers provided by their automated tools. Without such disclosure, computer programmers working within agencies could make adjustments, large or small, to the wording or ordering of the questions without causing members of the public to realize that these changes have occurred.

B. RELIANCE

1. Where Automated Legal Guidance Tools Provide Unilateral Guidance That Does Not Depend upon Users' Responses to Questions, Agencies Should Allow Users to Reasonably Rely on Such Statements to Bind the Agency

Some of the agencies' automated legal guidance tools that we reviewed provide information to users who inquire about specific topics without asking the users any follow-up questions. These automated tools present the same information to all users, regardless of their specific circumstances. For instance, when users interact with USCIS's Emma and ask: "If I am a lawful permanent resident, may I travel?", Emma responds: "Permanent residents are free to travel outside the United States, and temporary or brief travel (less than 1 year) usually does not affect

278. See *Interactive Tax Assistant (ITA)*, *supra* note 136.

279. *Meet Emma, Our Virtual Assistant*, *supra* note 79.

280. *Interactive Tax Assistant (ITA)*, *supra* note 136.

your permanent resident status” and provides links to other sections of the USCIS website.²⁸¹ Emma does not ask the user for additional information or vary her response depending on the user’s response to questions.²⁸² In this case, the agency is the only actor speaking. We describe this type of statement as “unilateral” guidance.

We recommend that where an agency makes statements to all users using language that does not vary depending upon responses from users to questions through automated legal guidance, agencies should allow users to reasonably rely on such statements to bind the agency. As a matter of procedural fairness, users should be able to rely on agency statements that do not conflict with formal law. If agency officials are bound by the agency’s statements through automated tools, agency officials may also exercise greater caution when programming the responses from these tools. This change would support procedural fairness, create more equal reliance opportunities for users with different economic resources, and potentially enhance agencies’ perceived legitimacy.²⁸³

We note, however, that our proposal regarding bindingness does not extend to “bilateral” administrative guidance—where users input information regarding their own personal circumstances in exchange for the output of advice from automated tools. First, the quality of the answers that automated tools, such as ITA, delivers is only as good as the information that the users provide.²⁸⁴ Second, in the case of bilateral administrative guidance, the information that automated tools provide varies among users, depending on the extent to which users input requested

281. Cf., e.g., Deirdre K. Mulligan & Kenneth A. Bamberger, *Saving Governance-by-Design*, 106 CALIF. L. REV. 697, 719 (2018) (explaining concern that “governance by way of automated processes is essentially tantamount to rule-making by programmers,” which is a “troubling’ delegation of legislative power that fails to satisfy norms of administrative process including transparency, participation, and legitimacy”).

282. See Parts I.B.2 & I.B.3 (detailing how Emma’s uniform responses fail to account for individuals’ particular circumstances and for agency decisionmakers’ discretion).

283. See, e.g., Karyl A. Kinsey, *Deterrence and Alienation Effects of IRS Enforcement: An Analysis of Survey Data*, in WHY PEOPLE PAY TAXES: TAX COMPLIANCE AND ENFORCEMENT 259, 259 (Joel Slemrod ed., 1992); John T. Scholz & Mark Lubell, *Trust and Taxpaying: Testing the Heuristic Approach to Collective Action*, 42 AM. J. POL. SCI. 398, 408 (1998) (discussing the sense of “duty and trust” individuals feel when understanding the tax return process).

284. Blank & Osofsky, *Automated Legal Guidance*, *supra* note 14, at 218–19 (highlighting the benefits associated with inputting personal information).

information accurately.²⁸⁵ Third, if it were binding on the agency, bilateral guidance could be subject to abuse.²⁸⁶

2. Where Automated Legal Guidance Tools Provide Either Unilateral or Bilateral Guidance, Agencies Should Allow Users to Reasonably Rely on Such Statements to Defend Against Penalties for Noncompliance

We recommend that agencies also allow users to reasonably rely on statements made by agencies' automated legal guidance tools to defend against penalties for noncompliance. This proposal should apply in situations where users show that they have reasonably relied upon *either* unilateral or bilateral administrative guidance.

As our study has documented, users who rely on unilateral guidance offered by agencies' automated tools may not be able to access certain defenses against penalties for noncompliance under current law.²⁸⁷ For example, if the IRS offered unilateral guidance regarding a tax compliance issue to a user through its website, individuals could not assert a "reasonable basis" defense against any subsequent accuracy-related tax penalties.²⁸⁸ Under this penalty defense, individuals must show that they reasonably relied upon a specific formal tax law source, such as the Code, Regulations, Revenue Rulings, judicial decisions, and announcements published by the IRS in the Internal Revenue Bulletin.²⁸⁹ Under our recommendation, individuals would be able to show reasonable reliance upon unilateral administrative guidance in order to assert a reasonable basis defense.

In situations involving bilateral administrative guidance, users should also be able to show reasonable reliance to assert defenses against penalties for noncompliance. While we have not recommended that bilateral administrative guidance should be internally binding upon agencies, we do not believe that allowing

285. *See id.* at 218 ("When taxpayers . . . input information . . . [the software] presents the taxpayer with an output that is seemingly personalized to the taxpayer.").

286. For example, taxpayers could input information regarding a purchase of equipment into ITA, but ignore the legal requirement that the equipment be related to a business, to generate an answer from ITA that the equipment is tax-deductible. *See* Blank & Osofsky, *Automated Legal Guidance*, *supra* note 14, at 218.

287. *See supra* notes 163–68 and accompanying text.

288. Treas. Reg. § 1.6662-3(b)(3) (as amended in 2003).

289. Treas. Reg. § 1.6662-4(d)(3)(iii) (as amended in 2003).

individuals to rely on such statements to defend against penalties would present opportunities for manipulation and abuse. First, in many cases, individuals must still show reasonable reliance when claiming legal positions.²⁹⁰ The reasonableness requirement would enable agencies and courts to reject penalty defenses where individuals inputted misleading or false information in order to generate a response that could be used as a penalty defense.²⁹¹ Second, under the law applicable to certain agencies, such as the IRS, individuals must disclose their reliance on a specific source to the agency in order to later use this reliance to claim a penalty defense.²⁹² This disclosure requirement should deter abusive use of bilateral statements by automated tools for the purpose of penalty defenses.

3. Agencies Should Allow Users to Download a Written Record of Correspondence with Automated Legal Guidance Tools

Agencies should design their automated tools to allow users to easily reproduce an electronic written record of every input by the user and output by the automated tool. At the most practical level, users could later refer to this record when deciding to take a specific action or wish to consider the guidance they received. They could also use this record when responding to potential challenges of their actions by agencies in the future, including as support for their defense against penalties for noncompliance.²⁹³

This recommendation addresses the limited and inconsistent ability of users to preserve records of their interaction with agencies' automated tools. In most cases of automated legal guidance currently in effect, we did not observe options that users could access for creating such a record. For example, until ACUS adopted this recommendation in June 2022, ITA did not provide taxpayers with a downloadable record of the taxpayers' responses to ITA's questions, making it difficult for taxpayers to use this interaction to defend against common civil tax penalties.²⁹⁴ All agencies should provide users with such a record, including all questions asked, all answers submitted, and the date

290. *Id.*

291. *See id.*

292. *See* Treas. Reg. § 1.6662-4(f) (as amended in 2003) (outlining a method of making adequate disclosure).

293. In order to receive the written record, users could be required to submit some personal identifying information, such as name and date of birth.

294. *See* ACUS Recommendation 2022-3, Automated Legal Guidance at

when the user submitted the request for information to the automated legal guidance tool.²⁹⁵

C. DISCLAIMERS

1. Agencies Should Include Disclaimers Regarding Limits on Users' Ability to Bind Agencies Using Statements by Automated Legal Guidance Tools

Agencies should include explicit disclaimers in their automated tools that describe users' ability to bind the agency using statements made by these tools. While some agencies provide limited disclaimers,²⁹⁶ we did not observe clear statements regarding the binding or non-binding nature of the information provided by automated legal guidance tools. If current law remains in effect, agencies should inform users that they will not be able to use statements made by automated tools to estop the agency from adopting contrary positions in the event of an agency challenge. On the other hand, if our prior recommendation is adopted,²⁹⁷ agencies should inform users what types of statements by automated tools are binding on agencies.

A potential objection to this recommendation is that it would require agencies to add significant text to automated tools that are designed to offer concise and simple explanations. However, agencies can offer disclaimers that exhibit clarity and brevity without referring extensively to legal authorities. Such disclaimers could be as simple as "In the event of future disputes or challenges, you may not rely on the answers provided to prevent this agency from adopting alternative interpretations of the law."

2. Agencies Should Include Disclaimers Regarding Limits on Users' Ability to Defend Against Penalties for Noncompliance Using Statements by Automated Legal Guidance Tools

During our study, we observed that, when offering automated legal guidance, most agencies do not include disclaimers regarding penalty relief. Some agencies, however, offer limited disclaimers. For example, the IRS includes a statement on ITA's final answer screen that describes the limits of taxpayers to use statements made by ITA to trigger protections under Section

Federal Agencies, 87 Fed. Reg. 39,801, 39,802 (July 5, 2022) (Recommendation 18).

295. *See id.*

296. *See, e.g., Interactive Tax Assistant (ITA), supra* note 136.

297. *See supra* Parts IV.B.1 & IV.B.2.

6404(f) of the Internal Revenue Code regarding erroneous agency statements, but does not include any disclaimers regarding the reasonable cause, reasonable basis, or other defenses against civil and criminal tax penalties.²⁹⁸

Agencies should provide disclaimers that address not only the binding nature of statements made by automated legal guidance, but that also describe users' ability to rely upon these statements to defend against penalties for noncompliance. If our prior recommendation is adopted,²⁹⁹ agencies should inform users that they may use their reliance on statements made by their automated tools to defend against specific penalties for noncompliance.

3. Where Automated Legal Guidance Uses Natural Language Processing, Agencies Should Provide Disclaimers That the Speaker Is Not Human

We recommend that when agencies use automated tools that have human appearance and employ natural language processing, they should inform users that the tool is not a human being. As we have documented, agencies have deployed automated tools that appear to be human beings who can engage in natural conversation with users. For example, USCIS's Emma appears to be a female individual with brown hair who speaks to users in the first person (e.g., "Hi, I'm Emma").³⁰⁰ USCIS provides information on Emma's background on its website by describing to readers that Emma is a "computer-generated virtual assistant who can answer your questions."³⁰¹ The agency could provide further disclaimers by programming Emma to state explicitly that she is not a human being and that her responses to questions are not provided by human beings in real time. Without this type of disclosure, automated legal guidance tools may cause some users to place too much confidence in their guidance. This would be especially problematic where the guidance is not consistent with the formal law and/or where users could not rely upon it to bind the agency or defend against penalties.

298. See *Interactive Tax Assistant (ITA)*, *supra* note 136.

299. See *supra* Parts IV.B.1 & IV.B.2.

300. *Meet Emma, Our Virtual Assistant*, *supra* note 79.

301. *Id.*

D. PROCESS

1. Agencies Should Adopt a Clear Chain of Command Regarding Design, Maintenance, and Review of Automated Legal Guidance and Publish Information Regarding This Process

Agencies should develop clear chains of command regarding the creation, review, and maintenance of guidance offered by automated legal guidance tools. During our study, we found that agencies have adopted a range of approaches to automated legal guidance. Some agencies have used a “top down” approach, where the agency’s general counsel’s office directs members of a technology team to program an automated tool to address substantive legal issues and questions.³⁰² Other agencies have more of a “bottom up” approach, where product developers have autonomy to create automated legal guidance tools and also to program and update the content provided by these tools.³⁰³ Irrespective of the model, our general observation is that, in several agencies, employees did not know the internal process for creating and maintaining automated legal guidance. For instance, in some agencies, individuals involved in computer programming did not know who made final decisions on the substantive legal rules that should be conveyed and who was responsible for reviewing legislative and judicial developments.³⁰⁴

To enhance accountability and transparency, agencies should adopt clear chains of command regarding automated legal guidance that clearly describe the responsibilities of members of the general counsel’s office, policy group, communications group, and technology groups, among others. Agencies should also publish this information to ensure that the chain of command is known within the agencies and can be reviewed by oversight institutions.

2. Agencies Should Solicit Independent Expert Evaluation of User Experience Regarding Automated Legal Guidance Tools During Both the Design and Delivery of Such Tools

As part of the formal process regarding the development and maintenance of automated legal guidance, agencies should in-

302. *See supra* Part II.A.

303. *See supra* Part II.A.

304. *See supra* Part II.A.

clude external expert review and analysis. During our interviews, we heard about many different individuals who are involved in the creation and maintenance of automated legal guidance at agencies.³⁰⁵ They included the product owner and members of the technology group, members of the policy team, members of the content team, members of senior leadership, content specialists, general counsel representatives, and members of the communications department, among others. We frequently heard that the automated tools offered by agencies were highly effective because they provided answers that were consistent with the agency's own summaries of the law, either through the general counsel's office or in other agency publications, and users reported high satisfaction.³⁰⁶ We did not, however, hear much about the participation of outside experts. Agencies should regularly subject their automated tools to review by technology and subject matter experts. External technology experts should regularly review whether the agency's automated tools are user-friendly and consistent with relevant industry standards. External practitioners should be involved throughout the process of developing and updating automated tools to ensure that they deliver information that is as consistent as possible with the formal law and unlikely to result in confusion among users.

3. The Federal Government Should Evaluate Costs and Benefits of Using Outside Vendors to Create and Deliver Automated Legal Guidance Tools

The federal government should evaluate the costs and benefits of relying upon outside vendors for the development of automated tools. During our interviews, we learned that most agencies that have deployed automated legal guidance tools merely purchased them, at least in part, from outside vendors.³⁰⁷ Agency officials then work with the outside vendor to design questions and answers that the automated tool will provide to

305. See *supra* Part II.A.

306. See *supra* Parts II.F & II.G; cf. Prentiss Cox & Kathleen Engel, *Student Loan Reform: Rights Under the Law, Incentives Under Contract, and Mission Failure Under ED*, 58 HARV. J. ON LEGIS. 357, 398 (2021) (citing critique by Deanne Loonin, staff attorney at the National Consumer Law Center, that customer satisfaction surveys are not a good means of evaluating student loan servicers because these borrowers "know very little about their accounts or what constitutes valuable servicing").

307. See *supra* Part II.A.

users. A benefit of this approach is that agencies have been able to introduce automated tools, such as Emma and Aidan, quickly and in a manner that is consistent with the types of services that private sector banks, airlines, and media companies offer to consumers.³⁰⁸ The reliance on outside vendors, however, is not without drawbacks. When agencies use outside vendors independently, the automated tools may differ depending upon the agency, making it difficult for the federal government to enforce consistent standards across agencies. In addition, external vendors that primarily serve private sector businesses and that seek to create the most personable and user-friendly automated tools may not be attuned to concerns that are unique to government agencies. For instance, these vendors may not incorporate disclaimers regarding formal law and the reliance of users into the basic design of their automated platforms.³⁰⁹

The federal government should regularly evaluate the costs and benefits of allowing agencies to use outside vendors, rather than internal departments, for the introduction of automated tools. We also recommend that the federal government consider developing templates for automated legal guidance tools that agencies could adopt rather than purchasing platforms from multiple external vendors.

E. ACCESSIBILITY, INCLUSION, AND EQUITY

1. Agencies Should Study Personal Characteristics of Users of Automated Legal Guidance Tools, Including Race, Income, Education, Marital Status, Gender, and Disability

Agencies should study the use of automated legal guidance by users with different personal characteristics, such as race, income, education, marital status, gender, and disability. Throughout our interviews, officials across federal agencies informed us that they do not collect or study information about the personal characteristics of users of their automated tools to comply with the law.³¹⁰ As a result of the “cascading effects” of lack of data, in 2021, President Biden issued an executive order that

308. See, e.g., *Meet Erica, Your Virtual Financial Assistant in the Bank of America Mobile Banking App*, BANK OF AM., <https://promo.bankofamerica.com/erica> [<https://perma.cc/S5ZB-HHY6>]; *Azure Health Bot*, MICROSOFT, <https://www.microsoft.com/en-us/research/project/health-bot> [<https://perma.cc/D2XK-DLT4>].

309. See *supra* notes 294–301 and accompanying text.

310. See *supra* Part II.H.

established an “Interagency Working Group on Equitable Data,” which must offer recommendations on best practices for studying effects of legal rules and policies on different individuals based on race, ethnicity, gender, disability, and other characteristics.³¹¹ Consistent with this initiative, agencies should research the types of users who rely on automated legal guidance to comply with the law in order to better “measure and advance equity.”³¹²

There are numerous ways in which agencies could design their studies of personal characteristics of users. Several agency officials described the extensive advance testing that their agencies conduct before they make these tools publicly accessible. They also commented that they track the annual usage of these tools.³¹³ In addition to this analysis, agencies could attempt to collect information on the characteristics of users by including surveys following taxpayers’ use of these tools regarding users’ income, marital status, and race, among others. Private sector businesses use these types of surveys regularly, especially where potential consumers access websites and other online services.³¹⁴

2. In the Event That Automated Tools Cannot Answer Users’ Questions, Agencies Should Automatically Provide Options for Users to Contact Human Customer Service Representatives

When automated tools are unable to provide answers to users’ questions, agencies should automatically provide information to users on how to reach human customer service representatives. Private sector businesses that use automated legal

311. Exec. Order No. 13,985, Executive Order on Advancing Racial Equity and Support for Underserved Communities Through the Federal Government, 86 Fed. Reg. 7009 (Jan. 25, 2021).

312. *Id.*; see also Jeremy Bearer-Friend, *Should the IRS Know Your Race? The Challenge of Colorblind Tax Data*, 73 TAX L. REV. 1, 2 (2019) (“[C]olorblind tax data needlessly blind us to how the burdens and benefits of our own tax laws are distributed.”) (citation omitted); Dorothy Brown, *Race and Tax: Colorblind No More*, JOTWELL (Feb. 25, 2021), <https://tax.jotwell.com/race-and-tax-colorblind-no-more> [<https://perma.cc/GJC3-SGMJ>] (examining how IRS colorblindness perpetuates systemic racism).

313. See *supra* Part II.H.

314. See Eugene Berko, *3 Reasons Why AI-Powered Customer Service Is the Next Big Thing*, ELEKS (Nov. 17, 2020), <https://eleks.com/blog/artificial-intelligence-customer-service-next-big-thing> [<https://perma.cc/Y2YV-BFWP>]; Vaish, *supra* note 209.

guidance tools often provide this information where the automated tools are not able to address customers' questions.³¹⁵ During our study, however, we found that agencies often do not provide information regarding human customer service as part of the interaction between users and automated tools. For example, when ITA provides its answer screen to users, it does not provide information regarding help lines or live customer service.³¹⁶ Similarly, Emma does not automatically offer this information during chat sessions with customers, though the USCIS website contains it.³¹⁷ Users must leave the chat session and hunt through multiple pages on the website to find information regarding human customer service.³¹⁸ Without addressing this omission, automated legal guidance may disproportionately disadvantage certain individuals, such as those who lack experience with online platforms, those who have disabilities that affect their ability to access such information, or those who lack any familiarity with the formal law in the area of inquiry.

3. Agencies Should Supplement Automated Legal Guidance with Continued Efforts to Create Other Avenues That Increase Access to the Underlying Law, Including Through Support for Pro Bono Legal Services and Increased Training of Customer Service Representatives Who Can Address Complex Questions from Users

While automated legal guidance offers agencies an efficient and immediate way to communicate the law, agencies that introduce this technology should explicitly acknowledge that it is only a single component of a greater effort to assist the public. As agency officials have acknowledged during our interviews, automated tools cannot address every user and every type of legal question.³¹⁹ Agencies should continue to pursue other ways to serve the public, especially low-income individuals and those who lack access to lawyers and other expert advisors. Agencies that adopt automated legal guidance should also continue to allocate resources to provide human customer service representatives, whether these representatives assist individuals in person, by phone, or through electronic means. In addition, agencies should continue to support assistance to individuals through pro

315. See, e.g., *Meet Erica*, *supra* note 308.

316. See *Interactive Tax Assistant (ITA)*, *supra* note 136.

317. See *Meet Emma, Our Virtual Assistant*, *supra* note 79.

318. See *id.*

319. See *supra* Parts II.D & II.E.

bono legal advisors, such as through pro bono legal clinics and by providing access to free online filing platforms, such as the IRS Free File program.³²⁰ Finally, in order to reduce the gap between formal and informal law, policymakers should explore reforms to the ways in which they draft formal law, such as through the use of rule-based statutory provisions and formalization of statutory language.³²¹

CONCLUSION

This Article has described the results of a study, originally conducted at the request of the Administrative Conference of the United States, regarding federal agency use of automated legal guidance. In this study, we identified a fundamental tension between agencies' promotion of automated legal guidance as an inexpensive way to access the law and limitations in the ability to make automated legal guidance personalized and reliable. Appreciating this tension is key to understanding when automated legal guidance is an appropriate solution to the difficult problem of how to communicate the law to the public. After analyzing the potential benefits and costs of the use of automated legal guidance by federal agencies, this Article offers detailed policy recommendations. These recommendations are organized into five categories: transparency; reliance; disclaimers; process; and accessibility, inclusion, and equity. This Article thus provides policymakers with a guide for how government agencies should seek to maximize benefits and minimize costs as they introduce automated legal guidance platforms. The analysis and recommendations of this Article are relevant to legislators, government officials involved in regulatory guidance, practitioners, and scholars specializing in administrative law, artificial intelligence, and social justice.

320. See *IRS Free File: Do Your Taxes for Free*, I.R.S. (Jan. 31, 2023), <https://www.irs.gov/filing/free-file-do-your-federal-taxes-for-free> [https://perma.cc/6KXA-EUCS].

321. For further discussion see Blank & Osofsky, *The Inequity of Informal Guidance*, *supra* note 14, at 1098–99.