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Centre for International  
Governance Innovation

CIGI Papers No. 319 – April 2025

# Talking to a Brick Wall

## The US Government's Response to Public Comments on AI

Susan Ariel Aaronson





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## About the Author

**Susan Ariel Aaronson** is a CIGI senior fellow, research professor of international affairs at George Washington University (GWU) and co-principal investigator with the NSF-NIST Institute for Trustworthy AI in Law & Society, where she leads research on data and AI governance. She is also a GWU Public Interest Technology Scholar and a Basillie Tech Scholar. Her research interests relate to the relationship between economic change, human rights and good governance.

Susan directs the Digital Trade and Data Governance Hub at GWU. The Hub was founded in 2019 and educates policy makers, the press and the public about data governance and data-driven change through conferences, webinars, study groups, primers and scholarly papers. It is the only organization in the world that maps the governance of public, proprietary and personal data at the domestic and international levels. The Hub's research has been funded by foundations such as Ford and Minderoo.

Susan directs projects on defining AI protectionism; how governments may incentivize more accurate, complete and representative data sets; and AI overcapacity. She regularly writes op-eds for *Barron's*, *Fortune* and other publications, and has been a commentator on economics for NPR's *Marketplace*, *All Things Considered* and *Morning Edition*, and for NBC, CNN, the BBC and PBS.

Previously, Susan was a guest scholar in economics at the Brookings Institution (1995–1999) and a research fellow at the World Trade Institute (2008–2012). Susan was also the Carvalho Fellow at the Government Accountability Project and held the Minerva Chair at the National War College.

In her spare time, Susan enjoys triathlons and ballet.

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## Executive Summary

In 2023, US President Joe Biden issued an executive order asking the assistant secretary of commerce for communications and information and head of the National Telecommunications and Information Agency (NTIA) to consult with the public “on the potential risks, benefits, other implications, and appropriate policy and regulatory approaches related to dual-use foundation models for which the model weights are widely available” (NTIA 2024a, 2).

The author used a landscape analysis to examine the dialogue between US officials (specifically the NTIA) and the public on open foundation models. The dialogue was dysfunctional. NTIA had many questions (some 52 in total), and most people did not answer the bulk of them, concentrating on one or two. NTIA did not make an extensive effort to get a diversity of responses. Many of the participants responded anonymously. The author also found that these respondents did not comprise a broad and representative sample of potential views. Most of the participants who responded publicly had a direct stake in these issues. Very few individuals with a more indirect stake such as consumers responded. Such a finding is typical of democracies.

But most importantly, NTIA did not respond to the comments it received. NTIA officials seemed to see their responsibilities as informing and soliciting the public but not really engaging in a collaborative approach to these important issues. The agency did not make an extensive effort to get a diversity of responses. Moreover, NTIA did not include any details about the public response in its final report in July 2024. Hence, the process was like talking to a brick wall.

The author notes that it is not easy to get useful public comment or to ensure that a diverse body of citizens is heard. Consequently, the author urges policy makers to rethink how they engage with their citizens on AI. The paper concludes by advocating for alternative approaches to public consultation on AI, including citizen science strategies, which offer greater potential for meaningful public engagement and trust-building.

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## Introduction

One company changed how the world thought about artificial intelligence (AI) and got policy makers concerned about open and closed systems. In December 2015, OpenAI was launched as a public benefit company. Its founders said the company would advance digital intelligence “in the way that is most likely to benefit humanity as a whole” (OpenAI 2015). Moreover, the company promised that its work would be open: “Our patents (if any) will be shared with the world. We’ll freely collaborate with others across many institutions and...companies to research and deploy new technologies” (ibid.).

But OpenAI did not live up to its name or its promises. In March 2019, OpenAI changed its financial structure and strategy. The non-profit now sat on top of a for-profit company, which would allow it to raise the huge venture capital funds needed to design, develop and deploy AI (Sinha 2024). Thereafter, OpenAI built its AI models on a closed or proprietary model. Almost two years later, in January 2021, OpenAI introduced the first iteration of Dall-E, a generative AI model that analyzes natural language text from human users and then generates images based on what is described in the text. In November 2022, OpenAI released a free first iteration of ChatGPT, a chatbot that many analysts described as the world’s most advanced (Hashemi-Pour, n.d.; Ortiz 2024).<sup>1</sup>

Soon thereafter, the world began to debate what it means for AI models to be fully open or closed to users. Developers of open models generally provide information to their stakeholders about the model, its weights (see Box 1) and its underlying data set. In contrast, developers of proprietary models restrict access to information about the model, its weights and the underlying data sets (NTIA 2024a).

The Biden administration made it very clear that it was determined to build trustworthy AI, an ill-defined concept. It noted that if models are closed or partially open, users may be unable to determine if these models are reliable, fair or trustworthy. For this reason, Biden issued an executive order asking the assistant secretary of commerce for communications and information (who was also head of NTIA) to solicit feedback through a public

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<sup>1</sup> See <https://huggingface.co/spaces/lmsys/chatbot-arena-leaderboard>.

consultation process (NTIA 2024a, 2). NTIA advises the president on information, telecommunications and related technology policy, including AI.<sup>2</sup>

The author used a landscape analysis to examine the dialogue between US officials and the public response. A dialogue entails both talking and listening. Although some 300 Americans participated in the dialogue, these commenters did not provide a representative sample of Americans who use or might be affected by open versus closed AI systems. Those who did provide their opinions likely had a direct stake in these issues. The dialogue was also dysfunctional because policy makers did not really listen to — or even report on — what they heard. In the author's past review of public comment, most people identify themselves (Aaronson and Zable 2023). When individuals respond anonymously, it is difficult to understand how and why they might have come to their point of view. The US government does not encourage or discourage anonymous comments, but a general review finds commenters may decide to respond anonymously to protect sensitive personal data (Government Accountability Office 2019).

Moreover, NTIA did not widely publicize the call, which made it harder for individuals to learn about the call and comment. Those who responded generally had a direct stake (as computer scientists, engineers, artists, teachers and so forth), and while the private sector, academia and a few civil society groups responded, very few stakeholders such as consumers responded. Moreover, NTIA did not include any details about the public response in its final report in July 2024. NTIA officials seemed to see their responsibilities as informing and soliciting the public but not really engaging in a collaborative analysis on these important issues. This analysis reveals it is not easy to get useful public comment or to ensure that a diverse body of citizens is heard. Consequently, the author urges policy makers to rethink how they engage with their citizens on AI, so they do not feel it is like talking to a brick wall.

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## Why Does Citizen Input Matter?

Diverse citizen input can help policy makers better understand existing and potential AI risks. Democracies depend on and function best when individuals participate in the civic process, such as by volunteering, voting or running for office. A healthy democracy requires institutions that are both trustworthy and trusted (Gopal 2017). Moreover, citizen input can ensure that AI is designed to serve the common good (Tasioulas, Landemore and Shadbolt 2023; Colom 2024). For example, average people may see or be affected by AI differently from those investing in and/or developing and/or deploying these systems. Moreover, if deployers are going to use AI in democratic states, citizens in democracies should participate in governing the use of AI (Milmo 2023). AI is often built on citizens' personal data, so it is important that citizens believe that data is used in an accountable manner (Aaronson 2024a). Public involvement in the design, deployment and governance of AI is essential because it can give citizens a voice over AI systems. Without such input, citizens may not accept AI (Stanton and Jensen 2021; Birhane et al. 2022; Sieber et al. 2024), seeing it as a threat to their safety, livelihoods and possibly to democracy.

The author herein relies on US government definitions to explain these complex technologies and issues but notes that other nations have different definitions of AI, open versus closed systems, and dual-use foundation models.

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<sup>2</sup> See [www.ntia.gov/office/office-assistant-secretary-oas](https://www.ntia.gov/office/office-assistant-secretary-oas); [www.ntia.gov/#:~:text=](https://www.ntia.gov/#:~:text=).



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### Box 1: Key Definitions

**AI:** Defined as a “machine-based system that can...make predictions, recommendations, or decisions influencing real or virtual environments.”<sup>3</sup>

**Dual-use foundation models:** Defined as “an AI model that is trained on broad data; generally uses self-supervision; contains at least tens of billions of parameters; is applicable across a wide range of contexts; and that exhibits, or could be easily modified to exhibit, high levels of performance at tasks that pose a serious risk to security, national economic security, national public health or safety.”<sup>4</sup> Dual-use foundation models are the Swiss Army Knives of the AI world. They can be used for multiple purposes and can be open (to various degrees) or closed (to various degrees). Both Dall-E and ChatGPT are dual-use foundation models.

**Model weights:** Defined as “numerical parameter[s] within an AI model that help...determine the model’s output in response to inputs.”<sup>5</sup> According to the US Department of Commerce (2024), “model weights reflect distillations of knowledge within AI models and govern how those models behave. Using large amounts of data, machine learning algorithms train a model to recognize patterns and learn appropriate responses. As the model learns, the values of its weights adjust to reflect its new knowledge.”

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## Why Does Openness Matter?

Students of democracy, good governance and economics have long viewed openness as a means of improving social, technological and economic systems. Openness is a contested term, and there is no one internationally accepted definition. But researchers generally agree that openness has direct and indirect benefits for both individuals and society. Openness can foster collaboration, participation and transparency among individuals, firms and groups. The author saw this in the call, where individuals as well as firms banded together to respond. Openness can also spur competition among companies, individuals and other entities, gradually yielding a thriving digital ecosystem. Finally, openness can also facilitate the spread of ideas, especially those that once seemed difficult, hard to accept or wrong (Tkacz 2012; Bovens and Düwell 2020).

Economists perceive openness as a continuum, with varied degrees in which foreign actors can participate in a particular country’s economy, politics and culture (Graeber et al. 2021). But these notions of openness are not so easily translated to technology, because researchers have long believed that innovation is best spurred by providing innovators with proprietary rights for a limited period (Saha and Bhattacharya 2011).

Science, as practised for the last century, provides a model for thinking about openness in AI models (Chuang et al. 2022).<sup>6</sup> Philosopher Karl Popper studied how scientific ideas evolve over time. He argued that scientists present a hypothesis and attempt to prove it to other researchers and the public. These other scholars then review such findings (peer review) to determine whether the hypothesis is correct or incorrect. Hence, science is a feedback loop, which provides lessons for democracy. In his later research on the open society, Popper linked his work on science to work on democracy, where representatives of the people must be transparent about their positions and open to new ideas as society, politics, the economy and technology change over time. Their peers (fellow citizens) review these ideas

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3 Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence, 88 Fed Reg 75191 (2023) § 3(b).

4 Ibid, § 3(k).

5 Ibid, § 3(u).

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6 See, as example, openness in education (Quinn 2021) and website openness (Welch and Wong 2001).

and determine what changes they want to see and what norms and policies they want to remain (Popper 2020). In this way, individuals have a voice and can find and join with others to assert their views (Bovens and Düwell 2020).

The open-source movement builds on these ideas. In the 1980s, Massachusetts Institute of Technology programmer Richard Stallman was unable to alter Xerox printing software because it was protected by laws governing intellectual property (IP) rights, and the software designer had signed a non-disclosure agreement. Stallman concluded that these restrictions, by limiting access and openness, made it difficult to revise or improve software. He declared, “All software should be free. Not (only) in the sense of free to use or free to distribute, but in that greater sense of free to change, modify, rewrite, adapt... — in short, a freedom to reorganise and modify the algorithms that instruct the machines that populate our worlds” (quoted in Tkacz 2012, 391).

Open-source AI is descended from the open-source software movement, but it is not quite the same. The Open Source Initiative defines “open source” as a “development method for software that harnesses the power of distributed peer review and transparency of process.”<sup>7</sup> Open-source approaches can facilitate an environment of collaboration and idea sharing. When developers make their algorithms and underlying data sets (and other criteria) publicly available, many people can contribute to the development, improvement and customization of these models. Others describe open source as akin to a community cookbook: “Everyone is encouraged to add their own recipes, tweak existing ones, and share feedback on how to make the dishes even better. This cookbook is always growing, changing, and improving with each contribution. Here, you can copy any recipe for yourself, modify it to suit your taste, and share your version with others....The open nature of the code encourages developers to write better code, ultimately leading to higher-quality software through community review and shared goals” (Mitton 2024). But this analogy is not quite true: not everyone can try the recipes because they lack the computational infrastructure and/or the skills. So, AI openness may not necessarily

yield a better understanding for most users of how any open-source AI program works.<sup>8</sup>

Open- and closed-source systems are difficult terms to reckon with — it is better to think of them as being on a gradient or a spectrum. Even AI developers disagree as to the meaning of open- and closed-source AI (Gent 2024; Vaughan-Nichols 2024a; Brooks 2024; Samila 2024). Moreover, some firms claim they are open source, but they are not fully open source. Critics call this phenomenon “open washing.” To remedy this problem, the Linux Foundation came up with a framework to describe degrees of open source, so that individuals can understand whether a particular AI variant is partially or fully open source (Tarkowski 2023; *The New York Times* 2024; cakerly 2024).

Open-source AI seems likely to build trust among users for several reasons. First, open-source AI allows users to see and try to understand how a particular algorithm works. Second, these users can also modify the system to meet their needs, or patch any vulnerabilities they might discover. Third, open-source AI and software create communities of people working together to build and refine systems, creating trust among a wide range of users and developers (Hunter 2024; Wilander 2021). Today, open-source tools are widely utilized (for example, Linux, an open-source operating system; Python, a programming language; and Git, a planning tool).<sup>9</sup> Linux is the industry-standard foundation for both cloud computing and the operating systems that run most mobile devices (Zuckerberg 2024). Governments such as Norway’s promote open software for government use because it is paid for by taxpayers.<sup>10</sup> The US government also encourages the creation of open-source software for government use (Shive 2019).

But many companies, including OpenAI and Microsoft, design and develop proprietary or closed-source AI. These firms do not share source code and use copyright and restrictive software licences to limit or prohibit copying and redistribution. They pay high labour, computing, personnel and infrastructure costs up front. Such closed-source developers provide

7 See <https://opensource.org/about/>.

8 The author is grateful to a blind reviewer for this insight.

9 For a survey of University of Wisconsin faculty, staff and students, see [https://uw-madison-dsi.github.io/open\\_source\\_survey\\_results/usage.html](https://uw-madison-dsi.github.io/open_source_survey_results/usage.html). For Python (on Git), see <https://git-scm.com/>.

10 See <https://github.com/navikt>.

others with little or no information about their models, training data and algorithms. Users outside the company are in the dark about these inputs (Bommasani, Liang and Lee 2023; Digital Public Goods Alliance and United Nations International Children's Emergency Fund 2023).

Meanwhile, users and other AI stakeholders seem ambivalent about the costs and benefits of open-source AI. Most of the respondents to NTIA's call seemed to support open-source AI while expressing concern for its potential risks. However, as the author shows later in this analysis, NTIA did not obtain a sufficiently broad and representative sample of the public or of concerns about open-source AI. Moreover, although the public is receptive to the concept of AI openness, a 2023 YouGov online poll of 1,128 individuals found that after defining open- versus closed-source AI models, only 23 percent supported "open sourcing powerful AI models" while 47 percent were opposed and 30 percent replied that they did not know (Artificial Intelligence Policy Institute 2023).<sup>11</sup>

Most firms that develop AI are neither completely closed nor completely open. For example, Meta describes its Llama 1 and 2 models as open source, but these models are not completely open. Meta provides details about its model code, model weights, user guides, licences, terms of use and model card, but it does not provide a full description of its data and data provenance.<sup>12</sup> However, Meta is a model of openness compared to OpenAI. The latter provides only vague information about its data sets and models. The company justifies this lack of transparency because it fears that if it opens its models, its competitors will copy them. Moreover, it says it cannot keep its models safe if they are fully open (Aaronson 2024a).

In 2023, it became clear that many firms creating open foundation models took some of their data from the Web without user and IP-holder permission. Companies and users began to sue (*ibid.*). Soon thereafter, many of the most prominent AI firms, including Meta, Google, Anthropic and OpenAI, described their models as possessing various degrees of openness, but they have become less open about how they assemble the data sets that underpin their models. They claim to be acting in the interest of safety and national security, but they are also acting this way because their executives face lawsuits in the United States and internationally (ChatGPT Is Eating the World 2024; Barcott 2024).

Meanwhile, developers and policy makers are still designing, developing and deploying variants of open-source AI. Two recent Chinese models challenged the traditional paradigm for developing AI because they supposedly used less energy and computing power to develop very good models. These models were also described as open, although they were not fully transparent (Chen 2025; Interesse 2025; Mak 2025). Mark Zuckerberg recently argued in a Meta blog post that the future of AI is open source. He noted that open source offers flexibility, is more secure, more protective of personal data, more efficient and affordable, and is likely to prevail in the long run (Zuckerberg 2024). Meta also produced commercials outlining the benefits of its "open-source" AI (PYMNTS 2024).

Openness can increase the accountability of models as analysts can gain a better understanding of how a large language model (LLM) was developed, how it operates and how it can be improved. By being open, these LLMs may inspire greater dialogue and innovation (Castelvecchi 2023). But openness does not yield accountability, *per se*. As David Gray Widder, Meredith Whittaker and Sarah Myers West (2023) note, variants of open AI may make models easier to analyze, alter and deploy. Open AI variants can also allow some forms of auditing and oversight. But these systems are not sufficient to achieve full democratic oversight. Moreover, openness can be risky: NTIA notes that open foundation models could engender risks "to security, equity, civil rights, or other harms due to...affirmative misuse, failures of effective oversight, or lack

11 The question was phrased as follows: "Lately there is a debate around open source AI models. Open source models are models where the code that created the model is public, so anyone can use and alter them. Supporters of open sourcing powerful AI models argue that making these technologies publicly accessible democratizes AI, ensuring that the power and benefits of AI are distributed among the masses rather than concentrated in the hands of a few entities. Opponents of open sourcing powerful AI models say that these models are becoming dangerous, that bad actors could use these models to build biological weapons, spread propaganda and more, and that powerful models must be controlled. What do you think? Should we open-source powerful AI models?" See the poll at [https://drive.google.com/file/d/1WmWxXbnY8cwZ2\\_t\\_K1LpXN8VICFT0pBu/view](https://drive.google.com/file/d/1WmWxXbnY8cwZ2_t_K1LpXN8VICFT0pBu/view).

12 For a better understanding of open data, see the Open Data Institute's Data Spectrum at <https://theodi.org/insights/tools/the-data-spectrum/>.

of clear accountability mechanisms.”<sup>13</sup> Finally, open foundation models may make it easier to attack proprietary models due to similarities in the training data sets. Criminals and/or terrorist groups could use these models to engage in harm or may facilitate mass disinformation campaigns.<sup>14</sup>

Many governments, including those of China (McBride 2024), France, Switzerland and the European Union (Vaughan-Nichols 2024b), support efforts to advance open-source AI. After reviewing public comments and doing its own research, NTIA determined that dual-use foundation models with widely available model weights (open to the public by allowing users to download these weights) provide many benefits, including diversifying and expanding the number of entities participating in AI research and development. These entities will provide new competition and less market domination by a few large AI developers. Finally, “they enable users to leverage models without sharing data with third parties, increasing confidentiality and data protection” (NTIA 2024a, 2). It is unclear whether the Trump administration will also advance open-source AI (Dori et al. 2024; Chow 2024; Aaronson 2024b; Kang 2025).

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## A Brief Literature Review of Participatory Governance

Policy makers in democratic societies usually engage directly or indirectly with key stakeholders to ensure that their policy choices are understandable, effective and politically viable. They also engage in dialogue with their constituents because they believe governments that are truly participatory build trust (Verhoest et al. 2024; Organisation for Economic Co-operation and Development [OECD] 2011, 2013). According to the OECD, “trust is essential for social cohesion and well-being as it affects governments’ ability to

govern and enables them to act without having to resort to coercion...[and it is] *necessary for the fair and effective functioning of government institutions*” (OECD 2013, 21–22, emphasis in original). An open dialogue between policy makers and the public can facilitate their understanding of what is right, fair and effective. Hence, policy makers who do not involve their publics in the discussion over AI are unlikely to build trust in AI or AI governance (Barocas, Hardt and Narayanan 2023; Sharp et al. 2022; Aaronson and Zable 2023).

But it is not easy and it is often expensive to create a feedback loop between an informed public and a responsive public service (Domínguez Figaredo and Stoyanovich 2023; Aaronson and Zable 2023). First, given the complexity and pace of change in AI, citizens may struggle to understand the issues. Second, citizens may be unwilling or uninterested in commenting on AI governance. As noted economist Mancur Olson (1971) described, citizens tend to use their limited time, energy and voice on a small range of issues that they care about deeply on the demand side. Meanwhile, on the supply side of governance, government officials may lack the will or may not be incentivized to incorporate what they hear into workable policies (Culver and Howe 2003).

But creating such a feedback loop can yield multiple benefits. According to the OECD, citizens may be able to point out new insights because they start from a different perspective. Moreover, consulting with citizens could increase both citizen and regulatory literacy. Such consultations may enable a systemic approach to governance and may ensure that as the public interest and AI evolve over time, governance can also evolve (OECD 2011, 9). The OECD also notes that “the steady adoption of representative deliberative processes suggests that it is seen as a trusted mechanism for public authorities to engage citizens and enhance the quality of public decisions.”<sup>15</sup>

For many years, policy makers in many countries have asked citizens to comment on proposed policies or regulations through a public registry or contact page, where one can mail in comments or provide comments online.<sup>16</sup> For example, the US government utilizes the Federal Register to

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13 Dual Use Foundation Artificial Intelligence Models With Widely Available Model Weights, 89 Fed Reg 14059 (2024) at 14061, online: <[www.federalregister.gov/documents/2024/02/26/2024-03763/dual-use-foundation-artificial-intelligence-models-with-widely-available-model-weights](https://www.federalregister.gov/documents/2024/02/26/2024-03763/dual-use-foundation-artificial-intelligence-models-with-widely-available-model-weights)>.

14 Ibid.

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15 See [www.oecd.org/en/topics/sub-issues/open-government-and-citizen-participation/innovative-public-participation.html](https://www.oecd.org/en/topics/sub-issues/open-government-and-citizen-participation/innovative-public-participation.html).

16 See, as example, for Canada, [www.gazette.gc.ca/consult/consult-eng.html](https://www.gazette.gc.ca/consult/consult-eng.html); for France, [www.elysee.fr/en/contact/](https://www.elysee.fr/en/contact/).



inform citizens about such rules and to ask their opinion (Office of the Federal Register 2013). In another example, the French government sought public comment before the Paris AI Action Summit in February 2025, which it plans to use to “inform concrete deliverables and actionable proposals to support the summit’s agenda-setting and outcomes.”<sup>17</sup> The author could not find evidence that the public comment actually influenced the summit agenda or outcomes.<sup>18</sup>

Some governments have tried to update the dialogue by using crowdsourcing. The US government defines crowdsourcing as “a process in which individuals or organizations submit an open call for voluntary contributions from a large group of unknown individuals (‘the crowd’) or, in some cases, a bounded group of trusted individuals or experts” (Gustetic et al. 2014).<sup>19</sup> In 2020, Statistics Canada crowdsourced an online survey among 37,000 Canadians from May 26 to June 8. It hoped to obtain a picture of how COVID-19 affected the Canadian population and their trust in government, medicine and other institutions,<sup>20</sup> but the government made it very clear that this was not a representative sample of Canadians’ views.

Calls for public comment and crowdsourcing are cheap and easy to use, but they cannot guarantee that policy makers receive the feedback they desire. First, there is no way of knowing that government officials will obtain an accurate, complete and representative sample of public opinion. Second, officials only get a snapshot of such opinion in time. Once the opinions are published, citizens can see what their fellow citizens thought, but they cannot really interact with each other and find consensus.

Given these limitations, some governments, companies and civil society groups have experimented with other approaches that seek to inform, involve and even collaborate with their stakeholders on AI governance. Several governments, including those of France

(DataGuidance 2024), the European Union<sup>21</sup> and Taiwan,<sup>22</sup> have convened AI assemblies. They invite a random sample of the public and then ask them their views. After these sessions, participants generally understand AI and can explain it. Moreover, because they are asked for their views on AI governance, they feel heard (Zhang 2024; Atwood and Bozentko 2023).

The US government has not attempted this approach. However, Baobao Zhang, a professor at Syracuse University, convened a nationwide virtual AI assembly in 2023. Participants heard from experts and deliberated about examples of AI systems regarding AI risks, issues of accountability and responsibility, and the harms of AI. However, this was not a governmental project. Zhang used foundation funds to compensate 40 participants as they examined the relationship of AI to administrative records, health records, browser/search history and facial recognition (Atwood and Bozenkto 2023). The Collective Intelligence Project acts as an incubator for new governance models for emerging technology to avoid trade-offs between progress, safety and participation.<sup>23</sup> It worked with OpenAI to organize citizen assemblies so that company executives could better understand public perspectives.<sup>24</sup> They found that many participants were more concerned about deskilling and loss of autonomy than about the safety of AI (Siddarth, Huang and Tang, n.d.). Here, again, the US government was not involved.

Other entities are working with civil society groups on alternative approaches. The Collective Intelligence Project also worked with Anthropic to create “constitutional AI,” ensuring that the AI is based on constitutional democratic norms (Abiri 2024). They then asked a representative group of Americans — again, across income, geography, age and gender — to draft a constitution for Anthropic’s LLM, Claude. Next, they tested the publicly drafted model against the model trained on a constitution written by researchers at Anthropic. They found

17 See [www.sciencespo.fr/en/news/ai-action-summit-take-part-in-our-online-public-and-academic-consultation/](https://www.sciencespo.fr/en/news/ai-action-summit-take-part-in-our-online-public-and-academic-consultation/).

18 See, for example, Jeanmaire and Zoumpalova (2025) and [www.elysee.fr/en/sommet-pour-l-action-sur-l-ia](https://www.elysee.fr/en/sommet-pour-l-action-sur-l-ia).

19 See [www.usgs.gov/programs/science-and-decisions-center/science/crowdsourcing-citizen-science-open-innovation](https://www.usgs.gov/programs/science-and-decisions-center/science/crowdsourcing-citizen-science-open-innovation).

20 See [www150.statcan.gc.ca/n1/daily-quotidien/200626/dq200626b-eng.htm](https://www150.statcan.gc.ca/n1/daily-quotidien/200626/dq200626b-eng.htm).

21 See <https://digital-strategy.ec.europa.eu/en/consultations/ai-act-have-your-say-trustworthy-general-purpose-ai>.

22 See [www.techpolicy.press/public-participation-is-essential-to-decide-the-future-of-ai/](https://www.techpolicy.press/public-participation-is-essential-to-decide-the-future-of-ai/).

23 See [www.cip.org/](https://www.cip.org/).

24 The Collective Intelligence Project works on collective intelligence capabilities: decision-making technologies, processes and institutions that expand a group’s capacity to construct and cooperate toward shared goals.

the public model was “less biased across the board, but just as capable at core tasks, as the researcher’s model” (Siddarth, Huang and Tang, n.d.).

In another example, Meta announced in November 2022 that it would launch a series of “community forums” to bring together diverse groups of people from all over the world to “discuss tough issues, consider hard choices and share their perspectives on a set of recommendations” (Harris 2022).<sup>25</sup> Meta executives worked with Stanford University’s Deliberative Democracy Lab to convene users on the topic of bullying and harassment. The lab created scientific samples of the world’s social media and recruited nearly 6,000 users from 32 countries in nine regions for a weekend-long deliberation. The team also organized a matching control group of comparable size that did not deliberate but took the same questionnaires in the same period in early December 2022. Meta claims it was a first-of-its-kind experiment in global deliberation (Sulots 2023). Stanford and Meta stressed that the process alternated between small group discussions and plenary sessions, where competing experts would answer questions agreed on in the small groups. The agenda was a series of 56 policy proposals that could be implemented by Meta or other platform owners. The proposals came not only with background materials but also with pros and cons posing trade-offs that the participants might want to consider. The organizers also provided video versions of the briefing materials to ensure an informed discussion (ibid.).

Some groups are experimenting with AI as a tool to encourage democratic deliberation. AI can help find hidden consensus among disparate opinions. Polis is a real-time, open-source AI system for gathering, analyzing and understanding what large groups of people think in their own words, enabled by advanced statistics and machine learning.<sup>26</sup> These systems are in their early stages. At a data governance conference at George Washington University (GWU) in December 2023, the Digital Trade and Data Governance Hub worked with the AI firm Consensus AI to ask attendees if they could find common ground on how the data for generative AI could be governed. The attendees found little consensus on data

governance, although they did agree on several politically possible mitigating strategies considering governance gaps and enforcement problems<sup>27</sup>

Connected by Data has done a spreadsheet reviewing 10 cases where governments or international organizations tried to involve their public in data governance.<sup>28</sup> Most of these cases did not achieve a representative sample of citizens or stakeholders. Moreover, as a 2024 paper showed, there is no clear definition of who should be involved in such deliberations and how they should be defined. Are they citizens? Are they stakeholders? Or are they something else? The authors argued that until we can answer who should be heard and how often or how loudly, these processes are likely to struggle (Sieber et al. 2024).

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## Methodology

The author relied on tools delineated by the International Association for Political Participation (IAP2) to describe the interaction between NTIA and the public on this issue. The IAP2 is an international association that provides public participation practitioners around the world with the tools, skills, and networking and training opportunities to advance and extend the practice of public participation. It has published both a set of core values and a spectrum delineating the levels of public participation in a democracy. These values include the principles that public participation:<sup>29</sup>

- “is based on the belief that those who are affected by a decision have a right to be involved in the decision-making process”;
- “includes the promise that the public’s contribution will influence the decision”;
- “seeks out and facilitates the involvement of those potentially affected by or interested in a decision”;
- “seeks input from participants in designing how they participate”;

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25 According to Meta, “Community Forums bring people together to discuss tough issues, consider hard choices and share recommendations for improving people’s experiences across our apps” (Clegg 2023).

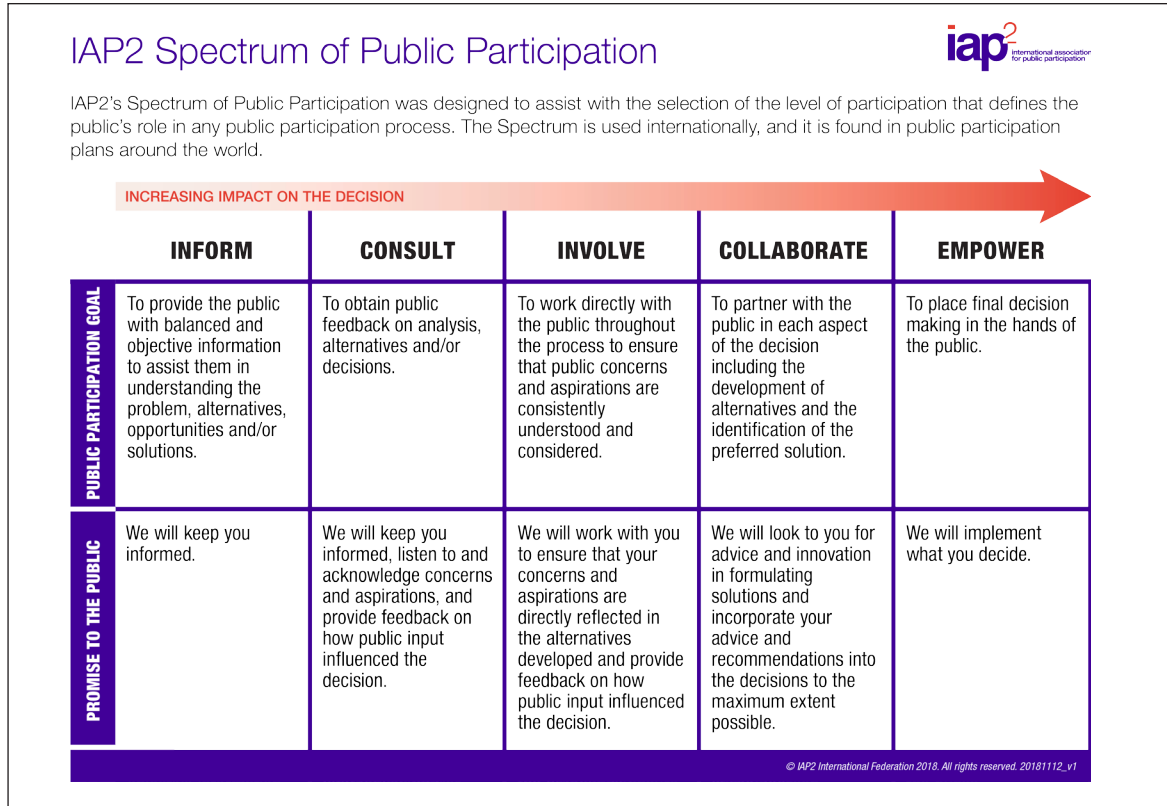
26 See <https://pol.is/home>.

27 The author organized the conference, and this analysis is based on her observations.

28 See <http://connectedbydata.org/cases>.

29 See [www.iap2.org/page/corevalues](http://www.iap2.org/page/corevalues).

**Figure 1: IAP2 Spectrum of Public Participation**



Source: <https://iap2usa.org/cvs>. Reprinted with permission.

- “provides participants with the information they need to participate in a meaningful way”; and
- “communicates to participants how their input affected the decision.”<sup>30</sup>

The spectrum in Figure 1 is designed to help policy makers, researchers and others achieve a more deliberative democracy. It is copied above with the permission of IAP2.

In a 2023 study, Susan Ariel Aaronson and Adam Zable sought to understand who policy makers consulted when they devised AI strategies. The authors developed five key questions:

- How and when did the government engage with its citizens?
- What materials did the government provide to prepare the public to give informed advice?

- Did policy makers attempt to ensure a broad cross-section of people knew about and could comment on the proposed policy?
- Who participated?
- Did the government provide evidence it made use of the feedback it received?

Then the authors used the IAP2 spectrum to characterize each case study. These questions and the spectrum will guide the authors’ discussion of their findings on the NTIA call on open/closed systems (Aaronson and Zable 2023, 7).

To assess the NTIA call, the researchers began by creating a list of everyone who responded to the call. They then conducted a landscape analysis, dividing the respondents into groupings that reflected their own descriptions as delineated in their comments or on a relevant

<sup>30</sup> See [www.iap2.org/page/corevalues](https://www.iap2.org/page/corevalues).

web page.<sup>31</sup> The researchers’ analysis is focused less on the comments, per se, and more on the process of obtaining and incorporating those comments into NTIA’s report.

The researchers then carefully reviewed NTIA’s response to comments and recommendations to the White House. NTIA issued a very thorough report in July 2024, which it described as “a non-exhaustive review of the risks and benefits of open foundation models” (NTIA 2024a, 3). It then categorized these risks and considered “under what circumstances the U.S. government should restrict

the wide availability of model weights for dual-use foundation models” (ibid.). But it barely referred to the comments it received from the public.

## Findings

### Who Responded to the Call for Comments?

Table 1 delineates who responded to the call for public comment. After deleting doubles, the author found 326 distinct comments. Seventy-four percent of the comments came from individuals; nine

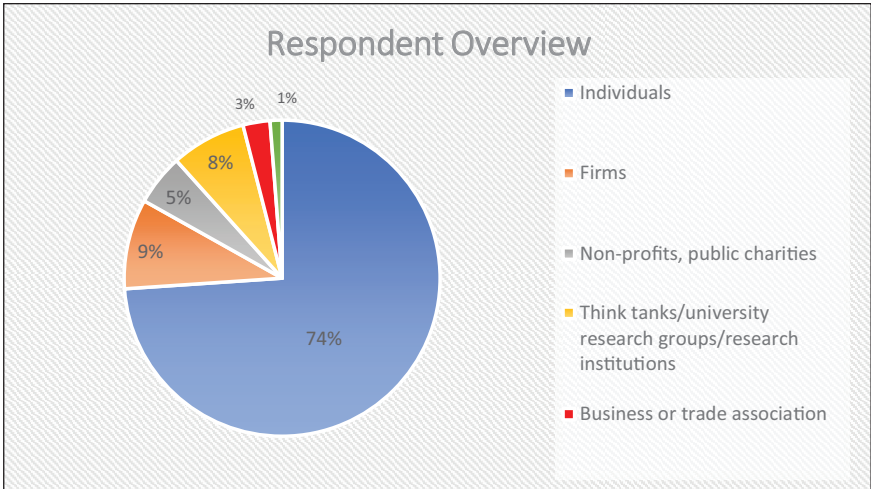
31 For example, the researchers used the web page of MLCommons to better understand what this group did; see <https://mlcommons.org/about-us/>.

Table 1: Who Responded to the Call for Comments?

Type of Respondent	Percentage of Responses	Number of Responses
Individuals	73.92638037	241/326
Firms	9.202453988	30/326
Non-profits, public charities	5.214723926	17/326
Think tanks, university research groups, research institutions	7.668711656	25/326
Business or trade associations	2.760736196	9/326
Other	1.226993865	4/326

Source: Table by Danielle Davenport, GWU.

Figure 2: Respondent Overview



Source: Author. Figure by Danielle Davenport, GWU.



percent came from firms; eight percent came from think tanks, university research groups or research institutions; five percent came from non-profits, charities or non-governmental organizations; and three percent came from business or trade associations (see Figure 2). The author grouped four participants (or one percent) as other, and noted that four of the individuals who provided comments came from outside the United States.<sup>32</sup> The author was not surprised that the bulk of respondents tended to be individuals, firms, associations or researchers with a stake in these questions.

Some 81 individuals, or 34 percent of those who commented, chose to be anonymous. Some of them did identify themselves by their initials, first names or professions (as example, “I am an artist, systems engineer, high school teacher and/or employee of an AI company” to underscore their expertise in answering the questions. Individuals may choose to be anonymous for a variety of reasons, which the author cannot assess herein, but 34 percent is an extremely large percentage of individuals. Many of them expressed strong support for open-source systems.

The Government Accountability Office studied public responses to Federal Register notices and found the lack of clarity regarding personal data protection could be an issue for potential commenters: “Selected agencies do not clearly communicate their practices for how comments and identity information are posted....As a result, public users of the comment websites could reach inaccurate conclusions about who submitted a particular comment, or how many individuals commented on an issue” (Government Accountability Office 2019, 1).

Although this is not the key purpose of this paper, readers may be interested in how the participants responded and what they said. The bulk of respondents and individuals, in particular, supported open-source systems, although many of those in favour delineated potential risks. For example, in its comments, OpenAI argued that the AI ecosystem could safely support both kinds of systems: “We have continued to support and believe in the promise of the open-source AI ecosystem, including by openly releasing the

weights of some of our state-of-the-art models (such as CLIP and Whisper) and developing open-source infrastructure for other AI developers” (OpenAI 2024). However, the company also noted that releasing its models in a proprietary manner “has enabled us to continue studying and mitigating risks that we discovered after initial release, often in ways that would not have been possible had the weights themselves been released” (ibid.).<sup>33</sup> The Consumer Technology Association (2024, 2), a technology trade association, said there are more benefits than marginal risks arising from the use of open-weight models. But it also warned, “Any new rules recommended by NTIA should be part of a risk-based, flexible approach that accounts for different use cases.” Engine, a non-profit technology policy start-up that aims to support a policy environment conducive to technology entrepreneurship, took a different perspective. It argued that open-weight systems lower barriers for start-ups and researchers. In fact, Engine (2024, 4) posited that AI regulation should be tailored to how AI is used and not segmented by whether it is open or closed. Finally, Databricks (2024, 1), a cloud-based processing and hosting platform, argued that open AI models will drive AI democratization, innovation, research, competition, productivity and economic growth. It was one of the few entities to answer every question.

Most of the individuals, associations and firms took the questions seriously. However, several individuals did not. These respondents provided vague comments or sent in tweets or artwork.<sup>34</sup>

## What Materials Did the Government Provide to Prepare/Enable the Public to Give Informed Advice?

In the “Supplemental Information” section, NTIA provided background and the authority for the call, definitions, and a list of nine major questions and sub-questions, which totalled 52 questions. However, many of the participants did not answer the bulk of the questions, and some seemed

32 The author’s spreadsheet delineating this analysis, prepared by Danielle Davenport, will be placed on the research section of the Digital Trade and Data Governance Hub website so that individuals can review the data set. See <https://datagovhub.elliott.gwu.edu/research-overview/>.

33 No. 24 in the author’s spreadsheet.

34 See [www.regulations.gov/document/NTIA-2023-0009-0001/comment](https://www.regulations.gov/document/NTIA-2023-0009-0001/comment) (comment ID NTIA-2023-0009-0013, NTIA-2023-0009-0042, NTIA-2023-0009-0085 and NTIA-2023-0009-0164, as examples, for vague comments that did not answer the questions; for tweets, NTIA-2023-0009-0014).

confused by them. The author's review of the responses led her to believe that the material was not clear enough or of sufficient interest to the broader public to give well-informed comments.

## Did the Government Attempt to Ensure a Broad Cross-Section of the Public Knew About the Call?

Alan Davidson, then assistant secretary of commerce for communications and information and head of NTIA, announced the call in a speech to the Center for Democracy & Technology (CDT) on December 13, 2023.<sup>35</sup> He noted, "We need your help. That is why I am pleased to join all of you today as NTIA kicks off public engagement in our review of AI openness. This review will lead to policy recommendations that seek to maximize the value of open source AI tools while minimizing the harms....Together, I know we can build that better version of our future" (NTIA 2023). On March 21, 2024, he gave a speech at the Center for Strategic and International Studies (CSIS), where he made the call the centerpiece of his talk. He stated, "To better understand the landscape of these difficult policy issues, we are seeking broad input" (NTIA 2024b).

He then went on to give several speeches in which he mentioned the call, but these talks were after the call closed. On March 27, 2024, after the call closed, Davidson briefly mentioned the work on open foundation models in a speech at Yale Law School. He noted that open foundation models should be audited but said nothing about the role of public participation and feedback in such audits. He concluded by saying, "This is our moment. The decisions we make now can lead us to a world where technology works in service of a more open, free, equitable and just society" (NTIA 2024c). In testimony before the House Committee on Energy and Commerce Subcommittee on Communications and Technology, he talked about the Federal Register notice. "Our Request for Comment in this proceeding attracted significant public interest, and our team is on track to deliver a report to the White House in July" (NTIA 2024d). But he did not delineate outreach efforts or what the respondents said in response to the call.

The Federal Register notice provided three ways for people to give their response: online, by mail

and by phone. It provided respondents with two names of NTIA staff who they could call with questions. The comment period was from February 20 to March 27, 2024, which might not have been enough time for all respondents to participate (NTIA 2024a). The author could not ascertain if this was a large or small number of commenters, as every Federal Register notice is different. In addition, the author could find no evidence the NTIA organized round tables, brainstormed with its constituents or worked with groups other than CSIS and CDT to do outreach. But that does not mean NTIA did not do so.

The author notes that NTIA is not required to provide every example of interaction with the public, business, civil society and academia on these issues and, hence, the author cannot say whether the agency made a significant effort to get such outreach. Moreover, the author has little information on how and when it may have sought such comment beyond these public speeches on the NTIA web pages.

## Did the Government Provide Evidence that It Made Use of the Feedback It Received?

In his March 21, 2024, speech to CSIS, Davidson provided some acknowledgement that NTIA was listening to the concerns expressed by respondents:

One thing we have already learned is the importance of focusing on the marginal or differential risks and benefits of open weights. For example, we need to measure the risks of open-weight models relative to the risks that already exist today from widely-available information, or from closed models. We have also been encouraged to hear that this is not a binary choice of "open" vs. "closed." Rather there is a broader "gradient of openness" that we need to consider and that may offer broader options for policy. I hope today's conversation will dive into some of these questions. We are particularly interested in hearing about the international implications of these powerful systems, and the national security considerations raised by widely available model weights. (NTIA 2024b)

But that was the only time the author could find evidence that the agency considered the feedback it received as it sought to advise the White House on open-source systems. In the July 2024 final

<sup>35</sup> See <https://cdt.org/who-we-are/>.

report, NTIA simply noted that it conducted extensive stakeholder output (NTIA 2024a, 3). The author could not find any evidence about that extensive stakeholder output, and when she sought to ask NTIA, she was turned down (see below).

## Applying the IAP2 Spectrum of Political Participation

NTIA informed and consulted with its traditional constituents about the issues of open versus closed or proprietary foundation models. Building on the definitions presented in the IAP2 spectrum, it did little to involve, collaborate with or empower the American people.

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## Final Thoughts

The author hoped to interview NTIA staff about the consultation and why public comment was not summarized in the report. In August 2024, the author wrote to Bertram Lee, the contact person listed in the Federal Register notice. He responded that he was going on vacation and suggested the author get back in touch later. Despite repeated follow-up emails, the author did not hear from him. On September 26, 2024, the author contacted Davidson, who responded immediately and facilitated a discussion among his staff involved in the call for October 4, 2024. On October 2, the author asked to interview NTIA staff on the consultation. However, NTIA cancelled the discussion and, hence, the author's attempts to better understand NTIA's process were for naught. For this author, like many of the individuals who commented, the interaction was like talking to a brick wall.

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## Conclusion

NTIA went through some of the motions of building a dialogue with the American people about open-source foundation models. However, its actions are unlikely to build trust. Trust, transparency, public participation and open source are closely correlated. According to Divya Siddarth, Saffron Huang and Audrey Tang (n.d.), "Transparency and open innovation is beneficial for

enabling trust in the results and wider participation, while the opportunity that open source poses for comparatively rapid and dispersed experimentation and iteration can increase the rate of learning in spaces where public input can be most effective in the AI development pipeline." In short, transparency and public participation can yield trust in open source — a virtuous circle (Casteltrione 2016; Campbell 2023).

Using the IAP2's principle as a guide for this analysis, NTIA did not provide a model of democratic governance of AI. NTIA did very little to encourage a broad public discussion, although it did provide the participants with the information they needed to give informed advice. NTIA did not appear to do much to ensure that a broad cross-section of constituencies responded to the call. It also did not show how the public comment influenced its recommendations to the president.

The individuals, firms and other entities that participated in the process were generally those whose voices are already heard on AI governance. Many of those who did provide feedback answered only a few of the questions, and a significant portion felt they must comment anonymously. Consequently, the consultation was a missed opportunity to build trust.

The US government clearly needs a new approach — one that consults with a broad cross-section of Americans and for which it is held to account/responsible for listening to their views. The current panoply of approaches is unlikely to achieve that goal.

One option might be to utilize citizen science strategies in concert with other approaches.<sup>36</sup> The United States<sup>37</sup> and other governments frequently collaborate with citizens to do scientific research. The US government has stated that "participatory forms of discovery lead to better scientific outcomes and increase trust in the scientific process."<sup>38</sup> Working together, governments and citizen scientists conduct field experiments and provide data sets that can be richer and more diverse. But citizen science has some challenges. These experiments can have problems with data accuracy, completeness and representativeness. In addition, citizen scientists

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<sup>36</sup> See [www.nesta.org.uk/feature/emerging-and-desirable-futures-for-citizen-science/how-ai-might-impact-citizen-science/](https://www.nesta.org.uk/feature/emerging-and-desirable-futures-for-citizen-science/how-ai-might-impact-citizen-science/).

<sup>37</sup> See [www.citizenscience.gov/#](https://www.citizenscience.gov/#)

<sup>38</sup> See [www.citizenscience.gov/about/#](https://www.citizenscience.gov/about/#).

may have different conceptions of reliability.<sup>39</sup> Many members of the public may view citizen science as too much work, or only for people trained in science. But citizen science makes contributors feel valued. Taiwan and New Zealand have used this approach to debate key national issues and to develop AI legislation.<sup>40</sup> The US government could take a similar approach when it seeks public opinion on complex questions such as the costs and risks of various types of AI and AI governance. In so doing, these agencies might get a broader, more representative sample of opinion and could sustain the trust needed to further and improve their efforts on behalf of their constituents.

## Works Cited

- Aaronson, Susan. 2024a. *Data Disquiet: Concerns about the Governance of Data for Generative AI*. CIGI Paper No. 290. Waterloo, ON: CIGI. [www.cigionline.org/publications/data-disquiet-concerns-about-the-governance-of-data-for-generative-ai/](http://www.cigionline.org/publications/data-disquiet-concerns-about-the-governance-of-data-for-generative-ai/).
- . 2024b. "Trump 2.0: Clash of the Tech Giants." Opinion, Centre for International Governance Innovation, December 11. [www.cigionline.org/articles/trump-20-clash-of-the-tech-bros/](http://www.cigionline.org/articles/trump-20-clash-of-the-tech-bros/).
- Aaronson, Susan Ariel and Adam Zable. 2023. *Missing Persons: The Case of National AI Strategies*. CIGI Paper No. 283. Waterloo, ON: CIGI. [www.cigionline.org/publications/missing-persons-the-case-of-national-ai-strategies/](http://www.cigionline.org/publications/missing-persons-the-case-of-national-ai-strategies/).
- Abiri, Gilad. 2024. "Public Constitutional AI." arXiv 2406.16696. <https://arxiv.org/abs/2406.16696>.
- Artificial Intelligence Policy Institute. 2023. "Poll Shows Voters Oppose Open Sourcing AI Models, Support Regulatory Representation on Boards, and Say AI Risks Outweigh Benefits." September 13. <https://theaiipi.org/poll-shows-voters-oppose-open-sourcing-ai-models-support-regulatory-representation-on-boards-and-say-ai-risks-outweigh-benefits/>.
- Atwood, Sarah and Kyle Bozentko. 2023. *U.S. Public Assembly on High Risk Artificial Intelligence 2023 Event Report*. Saint Paul, MN: Center for New Democratic Processes. [www.cndp.us/wp-content/uploads/2023/12/2023-U.S.-PUBLIC-ASSEMBLY-ON-HIGH-RISK-AI-EVENT-REPORT-final.pdf](http://www.cndp.us/wp-content/uploads/2023/12/2023-U.S.-PUBLIC-ASSEMBLY-ON-HIGH-RISK-AI-EVENT-REPORT-final.pdf).
- Barcott, Bruce. 2024. "AI Lawsuits Worth Watching: A Curated Guide." Tech Policy Press, July 1. [www.techpolicy.press/ai-lawsuits-worth-watching-a-curated-guide/](http://www.techpolicy.press/ai-lawsuits-worth-watching-a-curated-guide/).
- Barocas, Solon, Moritz Hardt and Arvind Narayanan. 2023. *Fairness and Machine Learning: Limitations and Opportunities*. Cambridge, MA: MIT Press. <https://fairmlbook.org/>.
- Birhane, Abeba, William Isaac, Vinodkumar Prabhakaran, Mark Díaz, Madeleine Clare Elish, Iason Gabriel and Shakir Mohamed. 2022. "Power to the People? Opportunities and Challenges for Participatory AI." arXiv 2209.07572. <https://arxiv.org/abs/2209.07572>.
- Bommassani, Rishi, Percy Liang and Tony Lee. 2023. "Language Models are Changing AI: The Need for Holistic Evaluation." Center for Research on Foundation Models. <https://crfm.stanford.edu/2022/11/17/helm.html>.

39 See [www.turing.ac.uk/research/research-projects/crowdsourced-and-citizen-science](http://www.turing.ac.uk/research/research-projects/crowdsourced-and-citizen-science).

40 See <https://compdemocracy.org/Case-studies/2014-vTaiwan/>; <https://compdemocracy.org/Case-studies/2016-New-Zealand-Scoop-Hivemind/>.



- Bovens, Mark and Marcus Düwell, eds. 2020. "The Open Society and Its Future." Think Paper Series #1. Utrecht, The Netherlands: Institutions for Open Societies, Utrecht University. [www.uu.nl/sites/default/files/IOS%20Think%20Paper%20Series%20%231.pdf](http://www.uu.nl/sites/default/files/IOS%20Think%20Paper%20Series%20%231.pdf).
- Brooks, Ben. 2024. "Open-Source AI Is Good for Us. But current regulatory trends threaten to quash transparency and competition in AI." *IEEE Spectrum*, February 8. <https://spectrum.ieee.org/open-source-ai-good>.
- cakerly. 2024. "Introducing the Model Openness Framework: Promoting Completeness and Openness for Reproducibility, Transparency and Usability in AI." *LF AI & Data Blog*, April 17. <https://lfaidata.foundation/blog/2024/04/17/introducing-the-model-openness-framework-promoting-completeness-and-openness-for-reproducibility-transparency-and-usability-in-ai/>.
- Campbell, Jesse W. 2023. "Public Participation and Trust in Government: Results From a Vignette Experiment." *Journal of Policy Studies* 38 (2): 23–31. <https://doi.org/10.52372/jps38203>.
- Casteltrione, Isidoropaolo. 2016. "Facebook and political participation: Virtuous circle and participation intermediaries." *Interactions: Studies in Communication & Culture* 7 (2): 177–96. [www.researchgate.net/publication/307997837\\_Facebook\\_and\\_political\\_participation\\_Virtuous\\_circle\\_and\\_participation\\_intermediaries/](http://www.researchgate.net/publication/307997837_Facebook_and_political_participation_Virtuous_circle_and_participation_intermediaries/).
- Castelvecchi, Davide. 2023. "Open-source AI chatbots are booming — what does this mean for researchers?" *Nature* 618 (7967): 891–92. <https://doi.org/10.1038/d41586-023-01970-6>.
- Chat GPT Is Eating the World. 2024. "Master List of lawsuits v. AI, ChatGPT, OpenAI, Microsoft, Meta, Midjourney & other AI cos." August 27 (last updated March 13, 2025). <https://chatgptiseatingtheworld.com/2024/08/27/master-list-of-lawsuits-v-ai-chatgpt-openai-microsoft-meta-midjourney-other-ai-cos/>.
- Chen, Lulu Yilun. 2025. "Jack Ma-Backed Ant Touts AI Breakthrough Using Chinese Chips." *Bloomberg*, March 24. [www.bloomberg.com/news/articles/2025-03-24/jack-ma-backed-ant-touts-ai-breakthrough-built-on-chinese-chips](http://www.bloomberg.com/news/articles/2025-03-24/jack-ma-backed-ant-touts-ai-breakthrough-built-on-chinese-chips).
- Chow, Andrew R. 2024. "What Trump's New AI and Crypto Czar David Sacks Means For the Tech Industry." *Time*, December 7 (updated December 10). <https://time.com/7200518/david-sacks-new-white-house-ai-crypto-czar-trump-administration/>.
- Clegg, Nick. 2023. "Bringing People Together to Inform Decision-Making on Generative AI." *Meta*, June 22. <https://about.fb.com/news/2023/06/generative-ai-community-forum>.
- Colom, Anna. 2024. "Meaningful public participation and AI." *Ada Lovelace Institute* (blog), February 1. [www.adalovelaceinstitute.org/blog/meaningful-public-participation-and-ai/](http://www.adalovelaceinstitute.org/blog/meaningful-public-participation-and-ai/).
- Consumer Technology Association. 2024. "Comments of the Consumer Technology Association in Response to the NTIA's Request for Comments on Dual Use Foundation Artificial Intelligence Models with Widely Available Model Weights." Docket Nos. NTIA-2023-0009; 240216-0052.
- Culver, Keith and Paul Howe. 2003. "Calling all citizens: The challenges of public consultation." *Canadian Public Administration* 47 (1): 52–75. <https://doi.org/10.1111/j.1754-7121.2004.tb01970.x>.
- Databricks, Inc. 2024. "Response to the NTIA Request for Comment on Dual-Use Foundation Artificial Intelligence Models with Widely Available Model Weights." March 27. [www.regulations.gov/document/NTIA-2023-0009-0001/comment](http://www.regulations.gov/document/NTIA-2023-0009-0001/comment).
- DataGuidance. 2024. "France: CNIL requests comments on new AI recommendations." June 10. [www.dataguidance.com/news/france-cnil-requests-comments-new-ai-recommendations](http://www.dataguidance.com/news/france-cnil-requests-comments-new-ai-recommendations).
- Digital Public Goods Alliance and United Nations International Children's Emergency Fund. 2023. "Core Considerations for Exploring AI Systems as Digital Public Goods." Community of Practice Discussion Paper. [www.digitalpublicgoods.net/AI-CoP-Discussion-Paper.pdf](http://www.digitalpublicgoods.net/AI-CoP-Discussion-Paper.pdf).
- Domínguez Figaredo, Daniel and Julia Stoyanovich. 2023. "Responsible AI literacy: A stakeholder-first approach." *Big Data & Society* 10 (2). <https://doi.org/10.1177/20539517231219958>.
- Dori, Yaron, Holly Fechner, Matthew Shapanka and August Gweon. 2024. "U.S. AI Policy Expectations in the Trump Administration, GOP Congress, and the States." Covington, December 18. [www.insideglobaltech.com/2024/12/18/u-s-ai-policy-expectations-in-the-trump-administration-gop-congress-and-the-states/](http://www.insideglobaltech.com/2024/12/18/u-s-ai-policy-expectations-in-the-trump-administration-gop-congress-and-the-states/).
- Engine. 2024. "Comments of Engine Advocacy Regarding Openness in AI Request for Comment." March 27. [www.regulations.gov/document/NTIA-2023-0009-0001/comment](http://www.regulations.gov/document/NTIA-2023-0009-0001/comment).

- Gent, Edd. 2024. "The tech industry can't agree on what open-source AI means. That's a problem." *MIT Technology Review*, March 25. [www.technologyreview.com/2024/03/25/1090111/tech-industry-open-source-ai-definition-problem](https://www.technologyreview.com/2024/03/25/1090111/tech-industry-open-source-ai-definition-problem).
- Gopal, Srik. 2017. "Understanding Trust to Strengthen Democracy." *Democracy Fund* (blog), August 21. <https://democracyfund.org/idea/understanding-trust-to-strengthen-democracy/>.
- Government Accountability Office. 2019. *Federal Rulemaking: Selected Agencies Should Clearly Communicate Practices Associated with Identity Information in the Public Comment Process*. GAO-19-483. Report to Congressional Requesters. June. [www.gao.gov/products/gao-19-483](https://www.gao.gov/products/gao-19-483).
- Gustetic, Jenn, Lea Shanley, Jay Benforado and Arianne Miller. 2014. "Designing a Citizen Science and Crowdsourcing Toolkit for the Federal Government." *The White House of President Barack Obama* (blog), December 2. <https://obamawhitehouse.archives.gov/blog/2014/12/02/designing-citizen-science-and-crowdsourcing-toolkit-federal-government#:~:text=>
- Harris, Brent. 2022. "Improving People's Experiences Through Community Forums." *Meta*, November 16. <https://about.fb.com/news/2022/11/improving-peoples-experiences-through-community-forums/>.
- Hashemi-Pour, Cameron. n.d. "What is OpenAI?" *TechTarget*. [www.techtarget.com/searchenterpriseai/definition/OpenAI](https://www.techtarget.com/searchenterpriseai/definition/OpenAI).
- Hunter, Paula. 2024. "Why Open Source Software is Secure, Reliable, and Better than Proprietary Software." *Finextra*, November 21. [www.finextra.com/blogposting/27253/why-open-source-software-is-secure-reliable-and-better-than-proprietary-software](https://www.finextra.com/blogposting/27253/why-open-source-software-is-secure-reliable-and-better-than-proprietary-software).
- Interesse, Giulia. 2025. "China's DeepSeek and its Open-Source AI Models." *China Briefing*, January 28. [www.china-briefing.com/news/chinas-deepseek-and-its-open-source-ai-models/](https://www.china-briefing.com/news/chinas-deepseek-and-its-open-source-ai-models/).
- Jeanmaire, Caroline and Tereza Zoumpalova. 2025. "Did the Paris AI Action Summit Deliver on the Priorities of Citizens and Experts?" *The Future Society*, February 28. <https://thefuturesociety.org/aiactionsummitvpublicpriorities/>.
- Kang, Cecilia. 2025. "Emboldened by Trump, A.I. Companies Lobby for Fewer Rules." *The New York Times*, March 24. [www.nytimes.com/2025/03/24/technology/trump-ai-regulation.html](https://www.nytimes.com/2025/03/24/technology/trump-ai-regulation.html).
- Mak, Robyn. 2025. "China's love of open-source AI may shut down fast." *Reuters*, April 2. [www.reuters.com/breakingviews/chinas-love-open-source-ai-may-shut-down-fast-2025-04-02/](https://www.reuters.com/breakingviews/chinas-love-open-source-ai-may-shut-down-fast-2025-04-02/).
- McBride, Keegan. 2024. "Open Source AI: The Overlooked National Security Imperative." *Just Security*, June 6. [www.justsecurity.org/96422/open-source-ai-the-overlooked-national-security-imperative/](https://www.justsecurity.org/96422/open-source-ai-the-overlooked-national-security-imperative/).
- Milmo, Dan. 2023. "'Bletchley made me more optimistic': how experts reacted to AI summit." *The Guardian*, November 3. [www.theguardian.com/technology/2023/nov/03/bletchley-made-me-more-optimistic-how-experts-reacted-to-ai-summit](https://www.theguardian.com/technology/2023/nov/03/bletchley-made-me-more-optimistic-how-experts-reacted-to-ai-summit).
- Mitton, Leanne. 2024. "Open Source vs. Closed Source Software." *Splunk* (blog), April 4. [www.splunk.com/en\\_us/blog/learn/open-vs-closed-source-software.html](https://www.splunk.com/en_us/blog/learn/open-vs-closed-source-software.html).
- NTIA. 2023. "Remarks of Assistant Secretary Alan Davidson on Open Artificial Intelligence Models." December 13. [www.ntia.gov/speech/testimony/2023/remarks-assistant-secretary-alan-davidson-open-artificial-intelligence-models](https://www.ntia.gov/speech/testimony/2023/remarks-assistant-secretary-alan-davidson-open-artificial-intelligence-models).
- . 2024a. *Dual-Use Foundation Models with Widely Available Model Weights*. NTIA Report. July. Washington, DC: NTIA. [www.ntia.gov/programs-and-initiatives/artificial-intelligence/open-model-weights-report](https://www.ntia.gov/programs-and-initiatives/artificial-intelligence/open-model-weights-report).
- . 2024b. "National Security and Open Weight Models." Remarks of Alan Davidson, Assistant Secretary of Commerce for Communications and Information, Washington, DC, March 21. [www.ntia.gov/speech/testimony/2024/national-security-and-open-weight-models](https://www.ntia.gov/speech/testimony/2024/national-security-and-open-weight-models).
- . 2024c. "Building an Ecosystem for AI Accountability." Remarks of Alan Davidson, Assistant Secretary of Commerce for Communications and Information, New Haven, CT, March 27. [www.ntia.gov/speech/testimony/2024/building-ecosystem-ai-accountability](https://www.ntia.gov/speech/testimony/2024/building-ecosystem-ai-accountability).
- . 2024d. "Written Statement of Assistant Secretary Alan Davidson Before the House Committee on Energy & Commerce Subcommittee on Communications & Technology." Washington, DC, May 15. [www.ntia.gov/speech/testimony/2024/written-statement-assistant-secretary-alan-davidson-house-committee-energy-commerce-subcommittee](https://www.ntia.gov/speech/testimony/2024/written-statement-assistant-secretary-alan-davidson-house-committee-energy-commerce-subcommittee).
- OECD. 2011. *Regulatory consultation in the Palestinian authority: a practitioners' guide for engaging stakeholders in democratic deliberation*. Paris, France: OECD Publishing. <https://unov.tind.io/record/69499>.

- . 2013. *Government at a Glance 2013*. Geneva, Switzerland: OECD Publishing. [http://dx.doi.org/10.1787/gov\\_glance-2013-en](http://dx.doi.org/10.1787/gov_glance-2013-en).
- Office of the Federal Register. 2013. "A Guide to the Rulemaking Process." <https://uploads.federalregister.gov/uploads/2013/09/The-Rulemaking-Process.pdf>.
- Olson, Mancur. 1971. *The Logic of Collective Action: Public Goods and the Theory of Groups*. Cambridge, MA: Harvard University Press.
- OpenAI. 2015. "Introducing OpenAI." December 11. <https://openai.com/index/introducing-openai/>.
- . 2024. "OpenAI's comment to the NTIA on open model weights." March 27. <https://openai.com/global-affairs/openai-s-comment-to-the-ntia-on-open-model-weights/>.
- Ortiz, Sabrina. 2024. "The best AI chatbots of 2025: ChatGPT, Copilot, and notable alternatives." ZDNET, December 13. [www.zdnet.com/article/best-ai-chatbot/](http://www.zdnet.com/article/best-ai-chatbot/).
- Popper, Karl. 2020. *The Open Society and Its Enemies*, vol. 1. Princeton, NJ: Princeton University Press.
- PYMNTS. 2024. "Meta's Open-Source AI Model Sparks Industry Debate on Commerce's Future." July 29. [www.pymnts.com/artificial-intelligence-2/2024/metas-open-source-ai-model-sparks-industry-debate-on-commerces-future](http://www.pymnts.com/artificial-intelligence-2/2024/metas-open-source-ai-model-sparks-industry-debate-on-commerces-future).
- Quinn, Robert. 2021. "Openness on American campuses is under threat. Here's how we preserve it." Charles Koch Foundation, November 12. <https://charleskochfoundation.org/stories/openness-on-american-campus-is-under-threat-heres-how-we-preserve-it/>.
- Saha, Chandra Nath and Sanjib Bhattacharya. 2011. "Intellectual property rights: An overview and implications in pharmaceutical industry." *Journal of Advanced Pharmaceutical Technology & Research* 2 (2): 88–93. <https://doi.org/10.4103/2231-4040.82952>.
- Samila, Sampsa. 2024. "The Open-Source AI Debate Pits Tech Leaders Against Each Other." *AI and the Future of Management* (blog), April 9. <https://blog.iese.edu/artificial-intelligence-management/2024/open-source-ai-debate-tech/>.
- Sharp, Darren, Misita Anwar, Sarah Goodwin, Rob Raven, Lyn Bartram and Liton Kamruzzaman. 2022. "A participatory approach for empowering community engagement in data governance: The Monash Net Zero Precinct." *Data & Policy* 4 (e5). <https://doi.org/10.1017/dap.2021.33>.
- Shive, David. 2019. "GSA Instructional Letter." US General Services Administration, January 14. <https://open.gsa.gov/oss-policy/#::~:~:text=>
- Siddarth, Divya, Saffron Huang and Audrey Tang. n.d. "A Vision of Democratic AI." *The Digitalist Papers*. [www.digitalistpapers.com/essays/a-vision-of-democratic-ai](http://www.digitalistpapers.com/essays/a-vision-of-democratic-ai).
- Sieber, Renée, Ana Brandusescu, Abigail Adu-Daako and Suthee Sangiambut. 2024. "Who are the publics engaging in AI?" *Public Understanding of Science* 33 (5): 634–53. <https://doi.org/10.1177/09636625231219853>.
- Sinha, Shreyas. 2024. "Why Would OpenAI Want to Become a True For-Profit Anyway?" *Observer*, July 6. <https://observer.com/2024/07/openai-for-profit-model/>.
- Stanton, Brian and Theodore Jensen. 2021. "Trust and Artificial Intelligence (Draft)." NIST IR 8332-draft. March 2. Gaithersburg, MD: NIST. [www.nist.gov/publications/trust-and-artificial-intelligence-draft](http://www.nist.gov/publications/trust-and-artificial-intelligence-draft).
- Sulots, Nora. 2023. "Results of First Global Deliberative Poll Announced by Stanford's Deliberative Democracy Lab." *Deliberative Democracy Lab*, June 22. <https://cddrl.fsi.stanford.edu/news/results-first-global-deliberative-poll-announced-stanfords-deliberative-democracy-lab>.
- Tarkowski, Alek. 2023. "The Mirage of Open-Source AI: Analyzing Meta's Llama 2 Release Strategy." *Open Future* (blog), August 11. <https://openfuture.eu/blog/the-mirage-of-open-source-ai-analyzing-metas-llama-2-release-strategy/>.
- Tasioulas, John, Helene Landemore and Nigel Shadbolt. 2023. "Bletchley declaration: international agreement on AI safety is a good start, but ordinary people need a say — not just elites." *The Conversation*, November 7. <https://theconversation.com/bletchley-declaration-international-agreement-on-ai-safety-is-a-good-start-but-ordinary-people-need-a-say-not-just-elites-217042>.
- The New York Times*. 2024. "Openwashing." May 17. [www.nytimes.com/2024/05/17/business/what-is-openwashing-ai.html](http://www.nytimes.com/2024/05/17/business/what-is-openwashing-ai.html).
- Tkacz, Nathaniel. 2012. "From open source to open government: A critique of open politics." *Ephemera: Theory & Politics in Organization* 12 (4): 386–405. <https://ephemerajournal.org/contribution/open-source-open-government-critique-open-politics-0>.
- US Department of Commerce. 2024. "NTIA Solicits Comments on Open-Weight AI Models." Press release, February 21. [www.commerce.gov/news/press-releases/2024/02/ntia-solicits-comments-open-weight-ai-models](http://www.commerce.gov/news/press-releases/2024/02/ntia-solicits-comments-open-weight-ai-models).
- Vaughan-Nichols, Steven J. 2024a. "Begun, the open source AI wars have." *The Register*, September 14. [www.theregister.com/2024/09/14/opinion\\_column\\_osi/](http://www.theregister.com/2024/09/14/opinion_column_osi/).

- . 2024b. "Switzerland federal government requires releasing its software as open source." ZDNET, July 23. [www.zdnet.com/article/switzerland-now-requires-all-government-software-to-be-open-source/](https://www.zdnet.com/article/switzerland-now-requires-all-government-software-to-be-open-source/).
- Verhoest, Koen, Dominika Latusek, Frédérique Six, Libby Maman, Yannis Papadopoulos, Rahel M. Schomaker and Jarle Trondal. 2024. "Trust and distrust in public governance settings: Conceptualising and testing the link in regulatory relations." *Journal of Trust Research* 14 (2): 127–56. <https://doi.org/10.1080/21515581.2024.2383918>.
- Welch, Eric W. and Wilson Wong. 2001. "Global Information Technology Pressure and Government Accountability: The Mediating Effect of Domestic Context on Website Openness." *Journal of Public Administration Research and Theory* 11 (4): 509–38. <https://doi.org/10.1093/oxfordjournals.jpart.a003513>.
- Widder, David Gray, Meredith Whittaker and Sarah Myers West. 2023. "Open (For Business): Big Tech, Concentrated Power, and the Political Economy of Open AI." SSRN. <https://ssrn.com/abstract=4543807>.
- Wilander, Joram. 2021. "Is Open Source More Secure Than Closed Source?" DevOps.com, April 14. <https://devops.com/is-open-source-more-secure-than-closed-source/>.
- Zhang, Baobao. 2024. "Public Participation is Essential to Decide the Future of AI." Tech Policy Press, February 5. [www.techpolicy.press/public-participation-is-essential-to-decide-the-future-of-ai/](https://www.techpolicy.press/public-participation-is-essential-to-decide-the-future-of-ai/).
- Zuckerberg, Mark. 2024. "Open Source AI is the Path Forward." Meta, July 23. <https://about.fb.com/news/2024/07/open-source-ai-is-the-path-forward/>.







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