

# The Needed Executive Actions to Address the Challenges of Artificial Intelligence

April 2023 By Adam Conner



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# Introduction and summary

Artificial intelligence (AI)<sup>1</sup> is becoming more widely available to the public and increasingly sophisticated, leading to the advent of what Bill Gates recently called “The Age of AI”<sup>2</sup>—an impactful technological paradigm shift. AI has been likened to the dramatic impact of the introduction of the personal computer, the internet, the mobile phone, social networks, and cloud computing.<sup>3</sup>

While various forms of artificial intelligence tools and applications have been in development for many years, it is the recent deployment of large language models<sup>4</sup> (LLMs, also referred to here as “advanced AI”), such as OpenAI’s ChatGPT,<sup>5</sup> that has sparked both global interest and concern. Although advanced AI has recently captured public attention, other forms of AI—already in use in government and industry—also raise concerns due to their potential to inflict harm. The policy issues and recommendations below apply to currently available automated systems—with special consideration of LLM-based AI applications—and with an eye to other forms of advanced AI on the horizon.

AI tools have the potential to bring tremendous benefits to our society. Yet the risks of AI are also profound—both by creating entirely new classes of problems and exacerbating existing ones.<sup>6</sup> To be sure, AI will not change everything overnight, but its public availability is already setting in motion potentially large shifts in many areas of society. There is also a sense of *déjà vu* of the advent of social media. Once again, we are poised to rapidly introduce a new technology to a society unprepared for its attendant consequences and without an adequate comprehensive response from government. Workers, families, and our democracy are poised to suffer consequences if we do not act now. We cannot allow the Age of AI to be another of age of self-regulation.

For all the similarities to the social media era that revolutionized communications while straining democracies,<sup>7</sup> there are, however, key differences with how advanced AI is developing. Specifically, its rapid and unbridled emergence is already garnering alarm from the high-profile researchers and corporate executives<sup>8</sup> who developed it. Despite playing critical roles in the development of AI,

they are calling for it to be regulated<sup>9</sup> and have suggested that this technology could lead to a range of catastrophic outcomes. Moreover, scores of prominent technology leaders have recently called for a six-month pause on the development and training of more powerful AI systems,<sup>10</sup> sparking great and needed debate.<sup>11</sup> But a pause is unlikely to occur given competing business incentives; would not fully address the range of current and future harms; and would be unhelpful without an accompanying plan of action.

Luckily, leading experts have already provided a plan of action for AI. Last fall, the White House Office of Science and Technology Policy (OSTP) released the Blueprint for an AI Bill of Rights<sup>12</sup> that:

*... proposes five principles to guide the design, development, and deployment of automated systems, such as AI. These five key expectations include: systems that are safe and effective; that protect us from algorithmic discrimination; that protect our data privacy, that allow insight into when and how they are being used; and that offer viable alternatives for opting out of their use.<sup>13</sup>*

President Joe Biden should address the challenges and opportunities of AI with an immediate executive order to implement the Blueprint for an AI Bill of Rights and establish other safeguards to ensure automated systems deliver on their promise to improve lives, expand opportunity, and spur discovery.

# Building off existing AI work

President Biden discussed both the opportunities and the risks of AI in his April meeting with the President’s Council of Advisors on Science and Technology, saying, “AI can help deal with some very difficult challenges like disease and climate change, but we also have to address the potential risks to our society, to our economy, to our national security.” The president emphasized that “tech companies have a responsibility, in my view, to make sure their products are safe before making them public.”<sup>14</sup> President Biden reiterated his call from his Wall Street Journal op-ed<sup>15</sup> and the 2023 State of the Union address<sup>16</sup> for a federal privacy law; new tech competition policies; and guardrails to ensure health, safety, and fair treatment online are top priorities. While these steps would provide a critical foundation for modernizing America’s laws to deal with known challenges already created by technology, including advanced AI, they would still leave us short of critical tools needed to address challenges from artificial intelligence and other new technologies.<sup>17</sup>

Fortunately, leading experts have already begun the work to outline how we can live in an AI world while protecting democratic values and essential rights. In October 2022—following a year of extensive stakeholder engagement with industry, civil society, academia, government, and the public—the OSTP released a Blueprint for an AI Bill of Rights,<sup>18</sup> a framework that “identified five principles that should guide the design, use, and deployment of automated systems to protect the American public in the age of artificial intelligence,” which include:

- **Safe and effective systems:** “You should be protected from unsafe or ineffective systems.”<sup>19</sup>
- **Algorithmic discrimination protections:** “You should not face discrimination by algorithms and systems should be used and designed in an equitable way.”<sup>20</sup>
- **Data privacy:** “You should be protected from abusive data practices via built-in protections and you should have agency over how data about you is used.”<sup>21</sup>
- **Notice and explanation:** “You should know that an automated system is being used and understand how and why it contributes to outcomes that impact you.”<sup>22</sup>

- **Human alternatives, considerations, and fallback:** “You should be able to opt out, where appropriate, and have access to a person who can quickly consider and remedy problems you encounter.”<sup>23</sup>

The Blueprint for an AI Bill of Rights outlines why these principles are important; what should be expected of automated systems; and details promising practices learned from industry, researchers, and civil society that show how these principles are already being moved into practice. It is a key starting point for action for those creating or utilizing AI systems by anchoring action with democratic values; providing consistent principles for newly created and fast evolving technologies; and ensuring balance between potential benefits and risks. As the Leadership Conference on Civil and Human Rights noted in April:

*Principles from the Blueprint for an AI Bill of Rights, agency actions, and a mandate via racial equity executive orders are a start, but further implementation and enforcement are urgently needed.*<sup>24</sup>

The Blueprint for an AI Bill Rights should be embraced as a foundation that can be built upon by the whole of society, including the executive branch; corporations building and deploying AI systems; and Congress. A blueprint lays out a framework but, as Silicon Valley is so fond of saying, it’s time to build.<sup>25</sup> However, unlike the social media era, this time we must build build a rights-based framework for action around advanced AI.

# Recommended executive action on artificial intelligence

In keeping with the Biden-Harris administration’s commitments to rein in Big Tech; preserve and grow opportunities for workers; harness science and technology for the betterment of society; and advance equity, the president must engage the whole of government to prepare for the challenges posed by advanced artificial intelligence and outline an affirmative vision of AI for the public good.

There are some promising developments on this front. The April 2023 announcement from the Department of Commerce’s National Telecommunication and Information Administration (NTIA) of an “AI Accountability Policy Request for Comment”<sup>26</sup> is an important step in gathering public input on AI policy matters. This request for comment makes repeated reference to the Blueprint for AI Bill of Rights and asks critical questions about key accountability mechanisms such as risk assessments and audits. But the President should not wait on the outcome of this this NTIA process to act.

The president should immediately issue a new executive order on artificial intelligence (AI EO) centered on implementing the Blueprint for an AI Bill of Rights. This executive order will develop a plan to maximize the potential public benefits of automated technologies, including advanced AI; direct relevant agencies to prepare for the potential for tremendous economic transition that will be catalyzed by the deployment of advanced AI, especially disruptions to employment; and order the national security community to consider ways to prepare and stop potential catastrophic threats stemming from AI.

A Biden-Harris administration AI EO should build off the two prior executive orders issued during the Trump administration: the February 2019 EO 13859, “Maintaining American Leadership in Artificial Intelligence”,<sup>27</sup> and the December 2020 EO 13960, “Promoting the Use of Trustworthy Artificial Intelligence in the Federal Government.”<sup>28</sup> A new AI EO should also be consistent with the racial equity and data priorities of the Biden-Harris administration’s January 2021 EO 13985, “Advancing Racial Equity and Support for Underserved Communities Through the Federal Government”<sup>29</sup> and the February 2023 EO 14091, “Further



Advancing Racial Equity and Support for Underserved Communities Through the Federal Government.”<sup>30</sup> Additionally, the new AI EO should direct the Office of Management and Budget (OMB) to issue new guidance to replace the November 2020 OMB Memo M-21-06<sup>31</sup> on compliance with previous AI EOs.

The Biden-Harris AI executive order should direct all federal agencies to implement the AI Bill of Rights for their own AI purchases and usage as well as direct key components of the government to prepare for the challenges of AI, as detailed below.

### **Create a new White House Council on Artificial Intelligence**

Co-chaired by the Domestic Policy Council (DPC), National Economic Council (NEC), and OSTP, the new White House Council on AI should coordinate all the administration’s activities on artificial intelligence, including the development of proposed legislation to submit to Congress for the regulation of AI. Such a White House council could be modeled after the White House Competition Council<sup>32</sup> or the CHIPS Implementation Steering Council<sup>33</sup> and include relevant executive branch agencies and invite independent agencies to participate.

The formation of the White House Council on AI will help government to prepare for the opportunities and challenges of AI that will cross every agency and department as well as be an exemplar of best practices in AI policy and practice.

### **Require federal agencies to implement the Blueprint for an AI Bill of Rights for their own usage of AI**

The president should require implementation of the Blueprint for an AI Bill of Rights<sup>34</sup> for all federal agencies for their own usage of AI, with a plan due to the White House Council on AI within 90 days for implementation by 2024. The Blueprint for an AI Bill of Rights provided a roadmap to move principles into practices but did “not constitute binding guidance for the public or Federal agencies.” The obvious next step is to require the Blueprint for an AI Bill of Rights to be implemented around use of AI by federal agencies. Agencies have a starting place with the public list of AI use-case inventories required from each federal agency<sup>35</sup> impacted by EO 13960<sup>36</sup> and subsequent OMB M-21-06 guidance.<sup>37</sup> There is support from many experts for this move. In the National Artificial Intelligence Advisory Committee (NAIAC) draft report released in late April, committee members Janet Haven, Liz O’Sullivan, Amanda Ballantyne, and Frank Pasquale “advocated to anchor this Committee’s work in a foundational rights-based framework, like the one laid out in OSTP’s October 2022 Blueprint for an AI Bill of Rights” and lamented the committee’s more immediate and tactical approach.<sup>38</sup>



## **Require all AI tools deployed by federal agencies or contractors to be assessed under the NIST’s AI Risk Management Framework and summaries to be publicly released**

The president should require all AI tools deployed by federal agencies or contractors to be assessed under the National Institute of Standards and Technology (NIST) AI Risk Management Framework (AI RMF),<sup>39</sup> which was designed “to improve the ability to incorporate trustworthiness considerations into the design, development, use, and evaluation of AI products, services, and systems.” Summaries should also be publicly released. The May 2023 draft report from the NAIAC recommended that:

*.. the White House encourage federal agencies to implement either the AI RMF—or similar processes and policies that align with the AI RMF—to address risks in all phases of the AI lifecycle effectively, with appropriate evaluation and iteration in place. We believe federal agencies can leverage the AI RMF to address issues relating to AI in scoping, development, and vending processes. These include but are not limited to bias, discrimination, and social harms that arise when building, assessing, and governing AI systems.<sup>40</sup>*

NIST’s Trustworthy and Responsible AI Resource Center,<sup>41</sup> which was created to “facilitate implementation of, and international alignment with, the AI RMF,” should help agencies coordinate those assessments. The president should also use his authority under the Federal Property and Administrative Services Act of 1949 (FPASA)<sup>42</sup> to require all federal contractors and subcontractors to assess any AI tools they use or deploy under the AI RMF, with implementing regulations to be expedited by the Federal Acquisition Regulatory Council (FAR).<sup>43</sup>

## **Reiterate that agencies should exercise all existing authorities to address AI violations**

While technology from automated systems and AI may be new it does not mean that existing laws and regulations no longer apply. It is now more important than ever that agencies exercise their existing authorities to provide clarity for AI policy. Examples can be found in the U.S. Equal Employment Opportunity Commission’s (EEOC) Artificial Intelligence and Algorithmic Fairness Initiative; the U.S. Copyright Office’s guidance on “Works Containing Material Generated by Artificial Intelligence”; and the FTC’s blog post on AI claims.<sup>44</sup> EO 13960 and OMB memo M-21-06 required all agencies to “identify any statutory authorities specifically governing agency regulation of AI applications.”<sup>45</sup> The White House Council on AI should require all agencies to reevaluate and detail their existing authorities on AI; submit an updated plan to OMB and the White House Council

on AI detailing how they will aggressively leverage their existing authorities on AI; and publicly post the list detailing their existing authorities and plans to use them. Further direction for agencies should be provided in the OMB guidance to succeed OMB memo M-21-06 and to implement this new EO.

### **Require federal agencies to assess the use of AI in enforcement of existing regulation and address AI in future rulemaking to the maximum extent practicable**

Because AI has the potential to touch nearly every aspect of our lives, it is reasonable to assume that its use by both private and public sector actors will implicate the enforcement of countless statutes by federal agencies. The president should require federal agencies to assess whether the use of AI by the entities they regulate could implicate their enforcement of existing regulations, and if appropriate, address that use in future rulemaking to the maximum extent practicable. For example, use of AI by nursing homes to identify potential health problems or establish safe staffing levels could raise both civil rights and safety concerns that, if left unregulated, could violate the letter or intent of consumer protection or civil rights statutes. Although no general authority may exist governmentwide to regulate AI tools, their use in certain industries or contexts may compel an agency to revise regulations to govern their use by regulated entities. Thus, the executive order could require each agency to survey existing regulations and consider future proposals to regulate AI tools in domain-specific contexts to the maximum extent practicable.

### **Require that all new federal regulations include an analysis of how the rulemaking would apply to AI tools**

The president should amend EO 12866, “Regulatory Planning and Review,”<sup>46</sup> to require agencies to provide to OMB—and include in any final rule—an assessment of how any proposed regulations would or would not apply to AI tools, similar to existing requirements around impacts on small businesses or state mandates. For example, if the Department of Health and Human Services were proposing new civil rights protections for Medicare beneficiaries, they would have to include an analysis of whether and how these protections apply to AI tools used by providers covered by the regulation.

### **Prepare a national plan to address economic impacts from AI, especially job losses**

The president should direct the White House Council on AI to work with the secretaries of Labor, Commerce, and Treasury as well as the Council of Economic Advisers on a national plan of action to address job losses and economic impacts

from advanced AI adoption. As the December 2022 White House Council of Economic Advisors report “The Impact of Artificial Intelligence on the Future of Workforces in the European Union and the United States of America”<sup>47</sup> noted:

*AI can also be used to automate existing jobs and exacerbate inequality, and it can lead to discrimination against workers. While previous technological advances in automation have tended to affect “routine” tasks, AI has the potential to automate “nonroutine” tasks, exposing large new swaths of the workforce to potential disruption.*

Preparing the American economy and labor force for this potential transition is critical before it happens.

### **Task the White House Competition Council with ensuring fair competition in the AI market**

The White House Council on AI and the White House Competition Council should investigate and take appropriate steps to address the state of competition in the artificial intelligence market, including the dependencies of AI LLMs on leading cloud computing providers and investigating other potentially anticompetitive measures.

### **Assess and prepare for potential artificial intelligence systems that may pose a threat to the safety of the American people**

The president should direct the National Security Council (NSC) and OSTP to assess and offer potential recommendations and interventions to mitigate potentially existential threats from the most potentially dangerous uses of AI—such as runaway artificial general intelligence<sup>48</sup>—that may pose a threat to the safety and well-being of the United States and its citizens. The challenges faced by the Trump administration and the Biden administration in acting against TikTok<sup>49</sup>—which is owned by a foreign company—are illustrative of potential challenges a president might face in taking action against a dangerous, domestic AI system. The NSC and OSTP should outline options available to the president with existing authorities and provide recommendations to the administration and Congress on the potential need for both new technical requirements and legal authorities to address potential existential risk. One potential example could be by proposing new laws for AI similar to the tools proposed in the RESTRICT Act.<sup>50</sup>

### **Commission report on how to advance AI for public good for expanded access to government services, ensuring greater public participation, and continued protection of rights**

The president should task the National Science and Technology Council<sup>51</sup> (NSTC) Select Committee on Artificial Intelligence<sup>52</sup> with drafting a report articulating a vision for advanced AI for the public good, with a focus on leveraging technology to expand access to essential government services and protection of rights. This should outline how to invest in increasing the capacity of governments to innovate and empower bureaucracies that could better serve needs in housing, health, food security, participatory democracy, and other key citizen engagement points. Given the potential society wide impacts from AI, the report should focus primarily on engaging with and gathering feedback from civil society and communities most affected by access to these rights and services through a series of public discussions, a criticism leveled at the existing NAIAC by committee members Janet Haven, Liz O’Sullivan, Amanda Ballantyne, and Frank Pasquale.<sup>53</sup>

### **Outline blueprints to utilize commercial artificial intelligence to maximize citizen and customer experience in interactions with government services in a manner that respects rights**

Most of the focus on AI has been around emerging commercial usage or government’s usage on its own citizens. Little focus has been given to the potential for advanced AI to increase access to government services and information but there is tremendous potential. The president should direct OSTP, OMB, the United States Digital Service (USDS), and the General Services Administration (GSA) to identify and outline blueprints to utilize commercial advanced AI to maximize citizen experience in information summary and access for citizens, interaction with customer service experience, and delivery of government services with appropriate rights respecting and risk management frameworks.

### **Task the Department of Commerce with identify ways to track the hardware and software required for LLMs and more advanced AI**

The president should direct the Department of Commerce through the new CHIPS office<sup>54</sup> and the National Semiconductor Technology Center<sup>55</sup> to study the appropriate ways to track the models and hardware needed to run the large cluster computing that is, in turn, required to train LLMs and other advanced AI models, including AI GPUs. This could potentially include software export controls; new hardware security features on chips; and tracking and licensing of chips and big computer clusters, as some experts have proposed.<sup>56</sup>

Additionally, the Biden-Harris administration should move quickly to nominate a U.S. chief technology officer (CTO) at OSTP<sup>57</sup> and appoint a director<sup>58</sup> of the National Artificial Intelligence Initiative Office (NAIIO),<sup>59</sup> recommendations also made by the NAIAC in their draft first report.<sup>60</sup>

The steps above are only those that president can take immediately to ensure rights-respecting measures, starting with our own government and its use of AI; preparing for the economic transition; and protecting the safety of the American people from all digitally derived harms and risks.

# Conclusion

Earlier this month, Dr. Alondra Nelson—former acting director of the White House Office of Science and Technology Policy (OSTP) who lead the development on the Blueprint for an AI Bill of Rights and CAP distinguished senior fellow<sup>61</sup>—wrote:

*We're having an AI moment ...We must start to act rather than pause. Policymakers should start acting now to create a future in which generative AI and other advanced technologies are placed in the service of human thriving and public benefit.*<sup>62</sup>

A new executive order on artificial intelligence will not solve all the challenges created by AI. A technology that may change all of society requires a response from all of society and from all of government. The president and the executive branch are poised to move fastest to address some of these challenges and align the federal government's actions and own use of AI along the values of the Blueprint for an AI Bill of Rights.

Meanwhile, Congress has already begun to engage in the legislative process around AI. Given the complexities of the topic and the fact that Congress has not passed any significant technology regulation in the last 25 years, if AI regulation is going to pass, it will likely pass only once, and, thus, it should be anchored in broad, flexible, and future-proofed principles that guarantee rights and certain basic safeguards while also creating the authorities needed to address potentially existential AI threats in the future.

In mid-April 2023, Senate Majority Leader Chuck Schumer (D-NY) announced the development of a high-level framework to regulate AI that consists of:

*... four guardrails: Who, Where, How, and Protect. The first three guardrails – Who, Where, and How – will inform users, give the government the data needed to properly regulate AI technology, and reduce potential harm. The final guardrail – Protect – will focus on aligning these systems with American values and ensuring that AI developers deliver on their promise to create a better world.*<sup>63</sup>

While further details on Majority Leader Schumer’s proposal have not been publicly released, there is potential interest in bipartisan cooperation on AI regulation.<sup>64</sup>

In the meantime, companies must be pressed to continue to take maximum steps to address the potential harms and risks from the new AI systems and should be anchored in noncorporate documents such as the Blueprint for the AI Bill of Rights. As many AI executives themselves note, self-regulatory measures will be insufficient and new legislation and regulation around AI is required.<sup>65</sup> Without swift intervention, the collective answer to these serious issues from those developing the technology advanced AI is to engage in a commercial arms race to release the product to the public as widely as possible, absent sufficient guardrails to protect the American people.

The recommendations listed above are a starting point for how to begin to address the challenges and opportunities that will be created by advanced artificial intelligence. Strong work has already been done by many scholars, activists, and government entities. In particular, the White House Blueprint for an AI Bill of Rights provides a strong foundation for building further protections grounded in the five principles they identified. There are clear roles and an urgent need for the president to act now.



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## Endnotes

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