

FEDERALISM & ALGORITHMS

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Artificial intelligence has catapulted to the forefront of political agendas throughout all levels of government. Across every major market and facet of society, policymakers face difficult tradeoffs between individual rights and collective welfare, innovation and regulation, economic growth and social equity. Federal and state institutions are resolving these tensions differently. The resulting policy patchwork may or may not be desirable, but the immediate point is that AI federalism is happening fast. To meet the moment, this Article provides the inaugural study and a research agenda for “AI federalism.” First, the Article provides the origin story of AI federalism, mapping the political and doctrinal territory. Second, the Article bridges disciplines and audiences who care deeply about AI’s place in society yet fail to appreciate how federalism can help or hurt the cause. Third, this Article makes a positive case for embracing AI federalism. While centralized AI policy at the national level has surface appeal, getting there requires a shared commitment on what to optimize for—as a nation, we are nowhere close. Federalism does not provide the answers. Rather, it provides a platform for dialogue and dissent, regulatory innovation and adaptation, intergovernmental cooperation and friction. This array of structural affordances is hard to find elsewhere in the law, and we likely need all of them to address AI’s sprawling economic and social disruptions.

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INTRODUCTION

Artificial intelligence has catapulted to the forefront of the political agenda for good reason.¹ No other technology is so ubiquitous and opaque, so accessible

1. The term AI is used here to describe computational systems that operate with varying degrees of autonomy to generate predictions, recommendations, decisions, text, audio, video, or other data to influence real or virtual environments. *See infra* Section I.A. (contextualizing this definition in relation to long-running debates about how to define AI and why definitions matter).

and consequential, so promising and perilous, and yet so legally unencumbered.² Across every major market and facet of society, policymakers are confronting difficult tradeoffs between individual rights and collective welfare, innovation and regulation, economic growth and social equity.³ Naturally, policymakers disagree about how to strike the right balance.⁴

At the national level, the 118th Congress considered dozens of AI-related bills but failed to enact any laws to regulate AI in the private market.⁵ President Biden issued a sweeping AI executive order and reams of policy guidance.⁶ However, President Trump immediately rescinded Biden's flagship AI policy and replaced it with a deregulatory agenda.⁷ Meanwhile, numerous states have enacted AI-focused laws to promote transparency, accountability, civil liberties, and consumer protection in areas ranging from education to employment, housing to healthcare, insurance to intellectual property, and beyond.⁸ The resulting patchwork of AI policy may or may not be desirable. More on that later.⁹ The immediate point is that AI federalism is advancing fast and requires urgent attention.

2. See *infra* Part I (discussing the proliferation, risks, benefits, and mostly unregulated status of modern AI systems); see also Ian Bremmer & Mustafa Suleyman, *The AI Power Paradox*, FOREIGN AFFS. (Aug. 16, 2023), <https://www.foreignaffairs.com/world/artificial-intelligence-power-paradox> [<https://perma.cc/9J52-A6ST>] (referring to the arrival of generative AI as a “Big Bang moment, the beginning of a world-changing technological revolution that will remake politics, economies, and societies”); NAT'L SEC. COMM'N ON A.I., FINAL REP. 19 (2021) [hereinafter NSCAI REPORT] (“Americans have not yet seriously grappled with how profoundly the AI revolution will impact society, the economy, and national security.”).

3. See *infra* Section I.C.

4. See *generally infra* Part II (examining the AI policy discourse across government institutions and levels of government).

5. See *infra* Subsection II.A.1.

6. See *infra* Subsection II.A.2.

7. See Exec. Order No. 14,148, 90 Fed. Reg. 8237, 8240 (Jan. 20, 2025) (repealing Exec. Order No. 14,110) (pending publication in the Federal Register); Exec. Order No. 14,179, 90 Fed. Reg. 8741, 8741 (Jan. 31, 2025) [hereinafter Exec. Order No. 14,179] (“This order revokes certain existing AI policies and directives that act as barriers to American AI innovation, clearing a path for the United States to act decisively to retain global leadership in artificial intelligence.”); *Fact Sheet: President Donald J. Trump Takes Action to Enhance America's AI Leadership*, THE WHITE HOUSE (Jan. 23, 2025), <https://www.whitehouse.gov/fact-sheets/2025/01/fact-sheet-president-donald-j-trump-takes-action-to-enhance-americas-ai-leadership> [<https://perma.cc/Q3MS-HYDK>] (directing executive agencies to revise or rescind all AI actions, including policies, directives, regulations, and orders that are inconsistent with the Trump Administration's deregulatory agenda); see also *infra* Subsection II.A.2 (discussing AI policies under the Biden and Trump Administrations).

8. See, e.g., MULTISTATE.AI [hereinafter MULTISTATE.AI Tracker], <https://www.multistate.ai/> [<https://perma.cc/MF94-QEFB>] (last visited Jan. 1, 2025) (tracking AI legislation in the States); SCOTT BABWAH BRENNEN & ZEVE SANDERSON, THE STATE OF STATE TECHNOLOGY POLICY 2024 REPORT 6–7 (2024) (same).

9. See *infra* Section II.D.

AI is not just another technology; it is a paradigm shift.¹⁰ For better or worse is a fair question, but it occludes more instructive ones. Ask, instead, whose lives will be better and worse, in what ways and by what means, and on what time horizon. These questions prompt still more: who should decide all the foregoing, and on whose behalf? When policy preferences differ, and they invariably will, federalism governs who decides.¹¹ That is why AI federalism matters today, and likely always will.

Under the right conditions, AI can solve complex problems, improve human decisions, optimize resources, and foster innovation across industries and scientific fields. Under the wrong conditions, AI systems pose serious threats to civil and criminal rights, safety and security, privacy and autonomy, sustainability and accountability, democratic norms, and the future of work. Decisions that are made—and not made—in the next few years will set trajectories and path dependencies that will echo for decades.¹²

To meet the moment, this Article provides the inaugural study and a research agenda for federalism in the AI age. Federalism is a platform for dialogue and dissent, regulatory experimentation and innovation, institutional friction and cooperation.¹³ One is hard-pressed to find this array of regulatory affordances in other areas of law, and we likely need all of them to address AI's sprawling economic and social disruptions.¹⁴ Not all will agree on how federalism's instruments of power should be used, by whom, and for whom. But that is precisely

10. See *infra* Sections I.A, I.B.

11. See, e.g., Ernest A. Young, *Making Federalism Doctrine: Fidelity, Institutional Competence, and Compensating Adjustments*, 46 WM. & MARY L. REV. 1733, 1822 (2005); ERIN RYAN, FEDERALISM AND THE TUG OF WAR WITHIN 6 (2011).

12. See, e.g., *Artificial Intelligence*, BIPARTISAN POL'Y CTR., <https://bipartisanpolicy.org/project/artificial-intelligence/> [<https://perma.cc/V5LH-7CTP>] (last visited Jan. 1, 2025) (“The future is unknowable, but it will be shaped by the decisions made today.”); see generally Bremmer & Suleyman, *supra* note 2 (“If governments do not catch up soon, it is possible they never will.”).

13. See *infra* Section II.D (discussing the values of federalism for AI regulation). For spins on how the values of federalism find expression across time and contexts, see for example Jeffrey S. Sutton, *21st Century Federalism: A View from the States*, 46 HARV. J.L. & PUB. POL'Y 31 (2023); Alexander Reinert, Joanna C. Schwartz & James E. Pfander, *New Federalism and Civil Rights Enforcement*, 116 NW. U. L. REV. 737 (2021); Heather K. Gerken, *Federalism as the New Nationalism: An Overview*, 123 YALE L.J. 1889 (2014); Cristina M. Rodríguez, *Negotiating Conflict Through Federalism: Institutional and Popular Perspectives*, 123 YALE L.J. 2094 (2014); Jessica Bulman-Pozen, *Partisan Federalism*, 127 HARV. L. REV. 1077 (2014) [hereinafter Bulman-Pozen, *Partisan Federalism*]; Ernest A. Young, “*The Ordinary Diet of the Law*”: *The Presumption Against Preemption in the Roberts Court*, 2011 SUP. CT. REV. 253; Bradford R. Clark, *Separation of Powers as a Safeguard of Federalism*, 79 TEX. L. REV. 1321 (2001); Erin Ryan, *Negotiating Federalism*, 52 B.C. L. REV. 1 (2011); Jessica Bulman-Pozen & Heather K. Gerken, *Uncooperative Federalism*, 118 YALE L.J. 1256 (2009); Robert A. Schapiro, *Toward a Theory of Interactive Federalism*, 91 IOWA L. REV. 243 (2005).

14. See *infra* Section II.D (discussing values of federalism for AI policy).

the point: these questions have escaped imagination as a field of academic concern.¹⁵ This Article sets the foundations for that work and advances it in three main ways.

First, the Article provides the origin story of AI federalism, mapping the political and doctrinal territory. Second, the Article connects stakeholders and policymakers who care deeply about AI's place in society yet fail to appreciate how federalism can help or hurt the cause. Third, it challenges those who insist that states should not regulate AI, either because nobody should or because only Congress should. To be sure, a centralized and unified national approach has appeal. But getting there will require compromise and consensus on what to optimize for. As a nation, we are nowhere close.¹⁶ Until then, federalism ensures that no single entity, institution, or individual has unfettered control over the future.

Nothing here presumes that states will get it right. Instead, the Article provides analytic grist and normative thrust to states that want to try. In most areas of concern, AI regulations will fall comfortably within a state's sovereign authority to promote the health, safety, and well-being of its residents.¹⁷ Against these sovereign interests, nothing in the Constitution requires regulatory efficiency or private economic gain. While federal law can preempt state law, the absence of federal law cannot. Thus, unless and until Congress regulates AI, states will have the legal and political remit to do so. In this context, intergovernmental friction and policy divides are not necessarily dysfunctional. They often reflect legitimate disagreements about what good outcomes should look like and how best to get there. The great genius of our federalism is not its efficiency, but rather its adaptability, resiliency, and pluralist capacity.

15. While some scholars have touched upon discrete aspects of AI federalism, the existing treatments are mostly orthogonal to this Article's main areas of concern. *See generally* Chad Squitieri, *Federalism in the Algorithmic Age*, 19 DUKE L. & TECH. REV. 139 (2021) (reviewing FRANK PASQUALE, *NEW LAWS OF ROBOTICS: DEFENDING HUMAN EXPERTISE IN THE AGE OF AI* (2020)) (championing states as potential counterweights to federal AI policymaking in the labor market); Bridget A. Fahey, *Data Federalism*, 135 HARV. L. REV. 1007 (2022) (detailing how intergovernmental data-sharing creates new sources of power, leverage, and bargaining among federal, state, and local actors). Moreover, they predate the rise of generative AI, which has completely revamped the policy landscape. *See infra* Subsection I.A.2 and Part II. Nor do existing accounts address doctrinal shifts at the Supreme Court. *See infra* Subsections II.A.3 (discussing how recent administrative law decisions from the Supreme Court will have collateral effects on AI federalism) and III.A.2 (discussing how the Supreme Court's narrowing of the Dormant Commerce Clause will impact state-level AI regulation).

16. *Compare* Exec. Order No. 14,110, 88 Fed. Reg. 75191 (Nov. 1, 2023) [hereinafter Exec. Order No. 14,110] (withdrawn by Exec. Order No. 14,148, 90 Fed. Reg. 8237 (Jan. 20, 2025)) (prioritizing AI safety, equity, and civil rights), *with* Exec. Order No. 14,179, *supra* note 7 (prioritizing deregulation to "sustain and enhance America's global AI dominance"); *see also* LAURIE HARRIS, CONG. RSCH. SERV., R48555, *REGULATING ARTIFICIAL INTELLIGENCE: U.S. AND INTERNATIONAL APPROACHES AND CONSIDERATIONS FOR CONGRESS* i (2025) ("No federal legislation establishing broad regulatory authorities for the development or use of AI or prohibitions on AI has been enacted.").

17. *See, e.g.,* *Medtronic, Inc. v. Lohr*, 518 U.S. 470, 475 (1996) ("Throughout our history the several States have exercised their police powers to protect the health and safety of their citizens.").

Policy advocates and academics have proposed a variety of ways that law can be leveraged to harness AI's potential across virtually every regulatory sector.¹⁸ But federalism is the operating system on which all these applications run; it can thus frustrate or facilitate policy prescriptions across the board.¹⁹ While the future of AI federalism cannot be preordained, it can be planned for and designed for. Now is the time to start.

Part I provides background about recent advancements in AI and its wide-ranging impacts. This context frames why AI regulation is arguably needed in some areas and desirable in others. Most importantly, it anchors why AI federalism matters: who decides AI policy will determine what is decided, the political and procedural rules of engagement, and the speed at which AI policy can be made and unmade. Part II builds on this account to map the policy landscape of AI federalism. Whatever one thinks of the policies emerging, federalism is a major causal factor. Part III bridges the origin story of AI federalism to its foreseeable future. There are, of course, innumerable possibilities. To organize the discussion, the Article conceives three main archetypes.

The first archetype is *AI federalism by default*.²⁰ This model is anchored to present trends and doctrines. It thus envisions federal and state institutions, acting and not acting, to render a regulatory quilt with no preset design. This stylized conception is roomy enough to accommodate a range of political contingencies. At root, however, AI federalism by default is characterized by a set of institutional dynamics: little to no national AI regulation, states filling the regulatory gaps, and courts mediating intergovernmental conflicts. It does not have to be this way, but it likely will be for the foreseeable future.

The second archetype is *AI federalism by design*. Unlike its foil, federalism by design features Congress as a principal architect of national AI policy.²¹ For instance, Congress can set national standards and prevent states from regulating AI in specific sectors or in certain ways. Alternatively, Congress can structure cooperative federalism programs, in which federal and state institutions partner to solve common problems within nationally prescribed frameworks. Even with coordination, we should not expect regulatory consensus. No amount of institutional design will resolve AI's regulatory challenges or satisfy all stakeholder interests.

The third archetype is *dynamic AI federalism*. This model blends elements of the former two regimes—some parallel play, some partnering—but is more than the sum of its parts.²² This account is both predictive and prescriptive. It recognizes that AI governance will be an ongoing and evolving challenge, just like the technology itself. The push and pull of federal and state interactions will surely be

18. See *infra* Section III.A. Just for instance, stakeholders will be well advised to know what types of federal agency action can preempt state law, and which cannot, before advocating for one type or the other. See *infra* Subsection III.A.1. Likewise, it will be important for state policymakers to anticipate which legislative proposals may violate the Dormant Commerce Clause, and as importantly, which will not. See *infra* Subsection III.A.2.

19. See *infra* Part III.

20. See *infra* Section III.A.

21. See *infra* Section III.B.

22. See *infra* Section III.C.

marked by friction and contestation. But in the face of transformative change, too little friction can be as dangerous as too much. On balance, dynamic AI federalism offers our best hope for developing governance structures that can keep pace with socio-technical change while safeguarding public interests.²³

Collectively, these visions of AI federalism capture a range of possibilities. Tidy and tame are not among them. Federalism and algorithms are platforms of politics and power. We should not expect clean unions. While the future of AI is uncertain, one thing is clear: it will be fought for and forged in federalism.

I. REGULATING AI

This Part introduces the key ideas, challenges, and stakeholders influencing AI policy. Section A opens with a general discussion of the technology itself. This provides the necessary foundations for engaging with AI's social and political implications.²⁴ Section B explains why AI regulation is needed to address gaps and mismatches in existing law. Section C reviews different approaches for regulating AI. The aim here is not to favor any approach but to highlight the tradeoffs in every approach. Section D turns to a temporal dilemma: regulate too soon, and AI benefits may be squashed or squandered; regulate too late, and AI risks could magnify and metastasize beyond redress. Section E surveys the primary players shaping AI policy along multiple dimensions: public and private, federal and state, political and judicial. This sets the foundation for the remainder of the Article, which analyzes the legal and political dynamics among these institutional deciders through a federalism lens.

A. *What is AI?*

AI is an umbrella term that covers a wide range of computer-based technologies.²⁵ Unless otherwise noted, this Article uses the term AI to describe computational systems that operate with varying degrees of autonomy to generate predictions, recommendations, decisions, text, audio, video, or other data to influence real or virtual environments.²⁶ This definition is mostly conventional, but it is not universal.²⁷ Debates over AI's meaning have shadowed the field for decades.²⁸ Having never been resolved, AI's definitional problem is now a

23. See *infra* Section III.C.

24. For a technical deep dive, see generally STUART J. RUSSELL & PETER NORVIG, *ARTIFICIAL INTELLIGENCE: A MODERN APPROACH* (4th ed. 2021).

25. See *id.* at 651–95; see also U.S. GOV'T ACCOUNTABILITY OFF., GAO-21-519SP, *ARTIFICIAL INTELLIGENCE: AN ACCOUNTABILITY FRAMEWORK FOR FEDERAL AGENCIES AND OTHER ENTITIES* 9, 13 (2021) (discussing an array of AI applications).

26. See, e.g., NAT'L INST. STANDARDS & TECH., *ARTIFICIAL INTELLIGENCE RISK MANAGEMENT FRAMEWORK (AI RMF 1.0)*, at 1 (2023) [hereinafter NIST AI RMF].

27. See U.S. GOV'T ACCOUNTABILITY OFF., GAO-18-142SP, *ARTIFICIAL INTELLIGENCE: EMERGING OPPORTUNITIES, CHALLENGES, AND IMPLICATIONS* 15 (2018) (discussing different definitions and taxonomies); Bill Kramer, *How to Define AI?*, MULTISTATE.AI (Oct. 27, 2023), <https://www.multistate.ai/updates/vol-2> [https://perma.cc/TF8A-MH7H] (collecting various definitions).

28. See RUSSELL & NORVIG, *supra* note 24, at 1–5.

regulatory problem.²⁹ If the definition of AI marks a line between what must be audited, licensed, etc., then a lot can hang on where that line is drawn.³⁰ Moreover, the definitional boundary has always been fluid.³¹ What was considered AI in the past is not today, and what is considered AI today might not be in the future.

1. *Machines that Learn*

AI's ascendancy over the past decade owes to the conflation of several developments: the availability of exponentially more data and computing power, and breakthroughs in "machine learning" technologies.³² Unlike traditional computer algorithms that require extensive manual coding, machine learning algorithms learn and improve by finding intricate patterns in large amounts of data.³³ For example, suppose the objective of a machine-learning AI system is to identify cancer in clinical images.³⁴ In that case, a computer can be fed many thousands of pre-labeled images of malignant and benign tumors and learn to distinguish the images based on patterns and correlations in the pixel data.³⁵ The trained algorithm (i.e., the model) can then be incorporated into other software systems to make diagnostic predictions for images not included in the training data.³⁶ Machine learning has also enabled AI systems to perform highly sophisticated tasks such as logistics planning and intelligence gathering for national security.³⁷ With each new capability, humans increasingly use AI to augment or supplant human capabilities.³⁸

29. See Paul D. Weitzel, *Defining Artificial Intelligence* 3 (Apr. 25, 2025) (unpublished manuscript), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5154389 [<https://perma.cc/9JHL-L4JZ>]; see generally Rashida Richardson, *Defining and Demystifying Automated Decision Systems*, 81 MD. L. REV. 785 (2022) (discussing how AI is variously defined, and arguably should be defined, for regulatory purposes).

30. Cf. KATE CRAWFORD, *ATLAS OF AI: POWER, POLITICS, AND THE PLANETARY COSTS OF ARTIFICIAL INTELLIGENCE* 7 (2021) ("Each way of defining artificial intelligence is doing work, setting a frame for how it will be measured, valued, and governed.").

31. See Edward Moore Geist, *It's Already Too Late to Stop the AI Arms Race—We Must Manage It Instead*, 72 BULL. ATOMIC SCIENTISTS 318, 318 (2016) (crediting John McCarthy with coining the term "AI effect" to describe the phenomenon where achievements in artificial intelligence are dismissed as not really AI once accomplished).

32. See NSCAI REPORT, *supra* note 2, at 20–21.

33. See Karen Hao, *What Is Machine Learning?*, MIT TECH. REV. (Nov. 17, 2018), <https://www.technologyreview.com/s/612437/what-is-machine-learning-we-drew-you-another-flowchart> [<https://perma.cc/E46N-TADA>]; David Lehr & Paul Ohm, *Playing with the Data: What Legal Scholars Should Learn About Machine Learning*, 51 U.C. DAVIS L. REV. 653, 671 (2017).

34. See, e.g., Sufiyan Bashir Mukadam & Hemprasad Yashwant Patil, *Machine Learning and Computer Vision Based Methods for Cancer Classification: A Systematic Review*, 31 ARCHIVES COMPUT. METHODS ENG'G 3015, 3015 (2024), <https://doi.org/10.1007/s11831-024-10065-y> [<https://perma.cc/7VFFV-8T4A>].

35. See *id.* at 3022.

36. See *id.* at 3039.

37. See, e.g., Sander Greenland, *Artificial Intelligence for Supply Chain Management: Potentials and Applications*, 5 LOGISTICS 84 (2021) (logistics planning); Ben Buchanan, *A National Security Research Agenda for Cybersecurity and Artificial Intelligence*, CTR. FOR SEC. & EMERGING TECH. 10 (May 2020) (intelligence gathering).

38. See Joshua A. Kroll et al., *Accountable Algorithms*, 165 U. PA. L. REV. 633, 636 (2017); Aziz Z. Huq, *A Right to a Human Decision*, 106 VA. L. REV. 611, 618 (2020);

This includes high-stakes settings such as law enforcement, healthcare delivery, cybersecurity, finance, and education.³⁹ Moreover, recent breakthroughs enable computers to perform tasks once thought to be exclusively human, such as creating new music⁴⁰ and discovering new chemical compounds.⁴¹

Much of this was already underway before 2023, but mostly out of public view.⁴² The release of ChatGPT in late 2022, however, thrust AI into the mainstream.⁴³ ChatGPT and its progeny are a class of AI called generative AI.⁴⁴ Like other forms of machine learning, generative AI systems are powered by algorithms that find patterns and correlations in training data.⁴⁵ However, unlike AI models that make predictions and classifications *about* data (e.g., predicting that a tumor is cancerous),⁴⁶ generative AI creates new data that *resembles* its training data.⁴⁷ Most generative AI tools are powered by large language models (“LLM”), trained on enormous corpora of text from the internet, books, research articles, and more. These models, prompted by users, can generate new text, such as essays, emails, research reports, coaching advice, and much else.⁴⁸ Though initially focused on text, the algorithms powering LLMs have unlocked new capabilities across all

see generally CATHY O’NEIL, WEAPONS OF MATH DESTRUCTION: HOW BIG DATA INCREASES INEQUALITY AND THREATENS DEMOCRACY (2016) (discussing a range of contexts where algorithms are used to make consequential decisions, from education, to finance, employment, criminal justice, and beyond).

39. *See* Peter Slattery et al., *A Systematic Evidence Review and Common Frame of Reference for the Risks from Artificial Intelligence*, ARXIV 7, 36–38 (Mar. 2024), <https://arxiv.org/abs/2408.12622> [<https://perma.cc/F2HP-5LA6>] (providing a repository of AI-related risks across dozens of domains and applications).

40. *See* JEAN-PIERRE BRIOT, GAËTAN HADJERES & FRANÇOIS-DAVID PACHET, DEEP LEARNING TECHNIQUES FOR MUSIC GENERATION – A SURVEY 1–3 (2019).

41. *See* Will Douglas Heaven, *AI Is Dreaming Up Drugs that No One Has Ever Seen. Now We’ve Got to See if They Work*, MIT TECH. REV. (Feb. 15, 2023), at 4, <https://www.technologyreview.com/2023/02/15/1067904/ai-automation-drug-development/> [<https://perma.cc/4G3U-BNGQ>].

42. *See* FRANK PASQUALE, THE BLACK BOX SOCIETY: THE SECRET ALGORITHMS THAT CONTROL MONEY AND INFORMATION 3–11 (2016).

43. *See generally infra* Part II (discussing dramatic uptick in AI policymaking initiatives at all levels of government).

44. *See* Helen Toner, *What Are Generative AI, Large Language Models, and Foundation Models?*, CTR. FOR SEC. & EMERGING TECH.: BLOG (May 12, 2023), <https://cset.georgetown.edu/article/what-are-generative-ai-large-language-models-and-foundation-models/> [<https://perma.cc/YE4S-VKHV>].

45. U.S. GOV’T ACCOUNTABILITY OFF., GAO-23-106782, SCIENCE & TECH SPOTLIGHT: GENERATIVE AI 1 (2023).

46. *See* Mukadam & Patil, *supra* note 34, at 3023, 3035.

47. *See, e.g.*, Exec. Order No. 14,110, *supra* note 16, at 75195, § 3(p) (defining generative AI as a class of models that “emulate the structure and characteristics of input data in order to generate derived synthetic content”); *see also* Matthew Sag, *Fairness and Fair Use in Generative AI*, 92 FORDHAM L. REV. 1887, 1888 (2024) (noting that the outputs of generative AI “are often indistinguishable from their human-authored counterparts”).

48. *See* Jingfeng Yang et al., *Harnessing the Power of LLMs in Practice: A Survey on ChatGPT and Beyond*, ARXIV 1–3, 6 (Apr. 27, 2023), <https://arxiv.org/abs/2304.13712> [<https://perma.cc/2A4Y-U3CW>] (examining the practical applications and broad accessibility of LLMs).

media, from images to video, speech to music, coding to web design.⁴⁹ Moreover, the underlying model architecture has been adapted for scientific applications, such as generating DNA sequences and drug development.⁵⁰

Despite impressive capabilities, today's AI systems remain brittle and error-prone.⁵¹ While they excel within the boundaries of their training data, machine-learning systems can fail catastrophically when encountering novel situations.⁵² Without causal reasoning and common sense, even the most advanced AI systems struggle to generalize knowledge across tasks and settings like humans do.⁵³ For these and other reasons, artificial "general" intelligence ("AGI") has not

49. See *id.* at 9, 13.

50. See Hugo Dalla-Torre et al., *Nucleotide Transformer: Building and Evaluating Robust Foundation Models for Human Genomics*, 22 NATURE METHODS 287, 287 (2025) (DNA sequencing); Kenneth Atz et al., *Prospective De Novo Drug Design with Deep Interactome Learning*, 15 NATURE COMM'NS 3408, 3408 (2024) (drug design); see also RISHI BOMMASANI ET AL., STAN. INST. FOR HUMAN-CENTERED A.I., ON THE OPPORTUNITIES AND RISKS OF FOUNDATION MODELS (2021) (providing comprehensive research on the adaptability of LLMs across different fields); see generally ASHISH VASWANI ET AL., ATTENTION IS ALL YOU NEED, NEURAL INFO. PROCESSING SYS. (2017), <https://papers.nips.cc/paper/2017/file/3f5ee243547dee91fbd053c1c4a845aa-Paper.pdf> [<https://perma.cc/4CYH-5DVT>] (introducing landmark research on the transformer architecture).

51. See Yann LeCun, *A Path Towards Autonomous Machine Intelligence 2–3* (June 27, 2022) (unpublished manuscript), <https://openreview.net/pdf?id=BZ5a1r-kVsf> [<https://perma.cc/Z8LN-ARDQ>] (arguing that current AI systems lack the ability to reason and learn like humans); GARY MARCUS & ERNEST DAVIS, REBOOTING AI: BUILDING ARTIFICIAL INTELLIGENCE WE CAN TRUST 18–24 (2019) (explaining the limitations of current AI systems, characterizing them as narrow in scope and brittle in performance).

52. See Percy Liang et al., *Holistic Evaluation of Language Models*, ARXIV 7, 9 (Oct. 1, 2023), <https://arxiv.org/pdf/2211.09110> [<https://perma.cc/B7HE-AR3S>] (documenting sharp accuracy drops when tasks introduce unfamiliar topics or formats); Gary Marcus, *The Next Decade in AI: Four Steps Towards Robust Artificial Intelligence*, ARXIV 1, 3–4 (Feb. 17, 2020), <https://arxiv.org/pdf/2002.06177> [<https://perma.cc/R93J-V33S>]. On the possibility of so-called artificial general intelligence, generally defined as a single AI model that can exceed human performance across multiple cognitive tasks, see for example, Tharin Pillay, *How OpenAI's Sam Altman Is Thinking About AGI and Superintelligence In 2025*, TIME (Jan. 8, 2025, at 16:25 ET), <https://time.com/7205596/sam-altman-superintelligence-agi/> [<https://perma.cc/G3TB-3QEU>]; Noor Gillani, *Will AI Ever Reach Human-Level Intelligence? We Asked Five Experts*, THE CONVERSATION (Apr. 18, 2023, at 20:20 ET), <https://theconversation.com/will-ai-ever-reach-human-level-intelligence-we-asked-five-experts-202515> [<https://perma.cc/TNH4-XX8D>].

53. See Melanie Mitchell, *Why AI Is Harder Than We Think*, ARXIV 3–5 (Apr. 28, 2021), <https://arxiv.org/abs/2104.12871> [<https://perma.cc/7EEW-VUTV>] (arguing that achieving AGI will require fundamental breakthroughs in areas such as common-sense reasoning, causal understanding, and the ability to generalize knowledge, which current AI systems lack); Karen Hao, *AI Still Doesn't Have the Common Sense to Understand Human Language*, MIT TECH. REV. (Jan. 31, 2020), <https://www.technologyreview.com/2020/01/31/304844/ai-common-sense-reads-human-language-ai/> [<https://perma.cc/5B5R-2NMV>]; JUDEA PEARL & DANA MACKENZIE, THE BOOK OF WHY: THE NEW SCIENCE OF CAUSE AND EFFECT 349–52 (2018).

yet been achieved.⁵⁴ While definitions vary, the term AGI often describes a hypothetical AI system that may someday match or exceed human capabilities across multiple cognitive domains, tasks, and contexts.⁵⁵

This Article takes no position on whether, when, or how AGI might be achieved.⁵⁶ Still, it must be taken seriously. Achieving AGI is the express *mission* of the world’s leading AI firms, if not also the United States and its chief global competitor, China.⁵⁷ With government backing, the private industry is investing hundreds of billions of dollars in a race to achieve AGI.⁵⁸ While the investment may not pay off, it also won’t be abandoned anytime soon. Because policymakers and stakeholders take the possibility of AGI seriously, any study of AI federalism must account for it as well.

2. Humans in AI Systems

AI systems are more than bits and bytes. They are assemblages of human design choices that encode values, assumptions, and priorities.⁵⁹ These human

54. See Mitchell, *supra* note 53, at 1, 3–5; LeCun, *supra* note 51, at 2–3 (arguing that current AI systems lack the ability to reason and learn like humans, and proposing a research agenda for developing more general AI through embodied learning and world models); Marcus, *supra* note 52, at 1, 3–4 (arguing for the integration of symbolic systems with neural networks to achieve more robust AI).

55. See, e.g., Meredith Ringel Morris et al., *Position: Levels of AGI for Operationalizing Progress on the Path to AGI*, ARXIV 1–2 (Mar. 17, 2024), <https://arxiv.org/html/2311.02462v4> [<https://perma.cc/TW3Q-MJ32>] (defining AGI as a system “at least as capable as a human at most tasks” and proposing a taxonomy for measuring generality and performance).

56. See, e.g., Gillani, *supra* note 52; see also Ringel Morris et al., *supra* note 55, at 1–2 (collecting different perspectives on the possibility, vel non, of AGI); *Planning for AGI and Beyond*, OPENAI: BLOG (Feb. 24, 2023), <https://openai.com/index/planning-for-agi-and-beyond/> [<https://perma.cc/V2ZV-UQD3>] (“Our mission is to ensure that artificial general intelligence—AI systems that are generally smarter than humans—benefits all of humanity.”).

57. See, e.g., Ezra Klein, Opinion, *The Government Knows A.G.I. is Coming*, N.Y. TIMES (Mar. 4, 2025), <https://www.nytimes.com/2025/03/04/opinion/ezra-klein-podcast-ben-buchanan.html> [<https://perma.cc/3VPF-FJ59>].

58. See, e.g., *Microsoft, OpenAI Plan \$100 Billion Data-Center Project*, REUTERS (Mar. 29, 2024, at 21:14 MT), <https://www.reuters.com/technology/microsoft-openai-planning-100-billion-data-center-project-information-reports-2024-03-29/> [<https://perma.cc/W6GA-RA9V>]; *AI Investment Forecast to Approach \$200 Billion Globally by 2025*, GOLDMAN SACHS (Aug. 1, 2023), <https://www.goldmansachs.com/insights/articles/ai-investment-forecast-to-approach-200-billion-globally-by-2025> [<https://perma.cc/QRA5-C6BK>].

59. See, e.g., Tonja Jacobi & Matthew Sag, *We Are the AI Problem*, 74 EMORY L.J. ONLINE 1, 21 (2024), <https://scholarlycommons.law.emory.edu/cgi/viewcontent.cgi?article=1049&context=elj-online> [<https://perma.cc/6LKP-KWPH>] (“Every AI system reflects human values and is significantly shaped by the choices made by its developers”); Charlotte A. Tschider, *Humans Outside the Loop*, 26 YALE J.L. & TECH. 324, 324 (2024) (“From data selection, decisional design, training, testing, and tuning to managing AI’s development as it is used in the human world, humans exert agency and control over the choices and practices underlying AI products.”). For critical treatments of the power dynamics infused in AI systems, see CRAWFORD, *supra* note 30, at 8; SAFIYA

elements remain largely invisible to end-users, creating a dangerous illusion that AI systems are objective or neutral when, in fact, they are anything but.⁶⁰ For instance, developers choose which problems AI should address, inherently prioritizing some social needs over others.⁶¹ Data scientists and engineers select which data to include in training sets, inevitably incorporating historical patterns that may reflect biases and inequities.⁶² Product development teams define which metrics constitute “success,” balance competing values like accuracy and fairness, and judge when systems are “good enough” or “safe enough” to deploy.

Humans also make countless choices about AI systems post-deployment,⁶³ such as what to monitor and how to act on those results.⁶⁴ System failures occur for many different reasons—some from misunderstanding or carelessness, others result from recklessness or indifference, and still others from malicious activity.⁶⁵ How to manage the risks, with what resources, etc., requires “value-laden tradeoffs between what is technically feasible, socially acceptable, economically viable, and legally permissible.”⁶⁶

UMOJA NOBLE, *ALGORITHMS OF OPPRESSION: HOW SEARCH ENGINES REINFORCE RACISM* 1–2 (2018); O’NEIL, *supra* note 38, at 29–31; Ngozi Okidegbe, *Discredited Data*, 107 CORN. L. REV. 2007, 2051–52 (2022) (describing use of algorithms as entrenching “epistemic oppression”); Solon Barocas & Andrew D. Selbst, *Big Data’s Disparate Impact*, 104 CALIF. L. REV. 671, 673–74 (2016) (exploring how institutional discrimination can be unknowingly programmed into AI).

60. See, e.g., Annie Liang, Jay Lu & Xiaosheng Mu, *Algorithmic Design: Fairness Versus Accuracy*, PROCS. 23RD ACM CONF. ON ECON. & COMPUTATION, July 11–15, 2022, at 58, <https://dl.acm.org/doi/pdf/10.1145/3490486.3538237> [<https://perma.cc/NF32-AQ32>] (analyzing the “tradeoff between fairness and accuracy, and how this tradeoff is shaped by the inputs available to the algorithm”); Emanuel Moss & Jacob Metcalf, *The Ethical Dilemma at the Heart of Big Tech Companies*, HARV. BUS. REV. (Nov. 14, 2019), <https://hbr.org/2019/11/the-ethical-dilemma-at-the-heart-of-big-tech-companies> [<https://perma.cc/ECY5-NC4Z>] (highlighting the tension between the race to market and the race to ethical AI).

61. See David Weinberger, *Optimization Over Explanation*, MEDIUM: BERKMAN KLEIN CTR. (Jan. 28, 2018), <https://medium.com/berkman-klein-center/optimization-over-explanation-41ecb135763d> [<https://perma.cc/K8GD-63NL>] (discussing policy choices inherent in selecting a model’s optimization function).

62. See, e.g., Mark A. Lemley & Bryan Casey, *Fair Learning*, 99 TEX. L. REV. 743, 745 (2021) (“[I]n order to create the right conditions for this learning process, engineers must begin by collecting and compiling enormous databases of exemplary tasks for machines to practice on, known as ‘training sets.’”); see also Alice Xiang, *Fairness & Privacy in an Age of Generative AI*, 25 COLUM. SCI. & TECH. L. REV. 288, 288 (2024) (explaining how bias manifests in generative AI outputs due to skewed representation in the training data).

63. See NIST AI RMF, *supra* note 26, at 5–6 (discussing risk management of AI systems in deployment).

64. See *id.*

65. See *id.*; Microsoft Threat Intel., *AI Jailbreaks: What They Are and How They Can Be Mitigated*, MICROSOFT: SEC’Y BLOG (June 4, 2024), <https://www.microsoft.com/en-us/security/blog/2024/06/04/ai-jailbreaks-what-they-are-and-how-they-can-be-mitigated/> [<https://perma.cc/Z2QP-M4CC>]; DAVID LESLIE, ALAN TURING INST., *UNDERSTANDING ARTIFICIAL INTELLIGENCE ETHICS AND SAFETY* 32 (2019) (discussing various adversarial attacks on machine-learning systems).

66. David S. Rubenstein, *Acquiring Ethical AI*, 73 FLA. L. REV. 747, 752 (2021).

A human-centric orientation is essential here for two related reasons. First, it makes AI policy discourse more legible and tractable. AI technologies are part of a larger ecosystem comprising data, software, hardware, humans, and human-computer interactions—all of which can be regulated.⁶⁷ Second, design choices can have far-reaching consequences for society as a whole, both beneficial and detrimental.⁶⁸

B. Why Regulate AI?

The widespread deployment of AI systems has exposed a range of ways these systems can fail, not only through design defects and malicious activity but also through market failures.⁶⁹ Without regulatory interventions, many avoidable harms may occur precisely because of accountability gaps, legal mismatches, and epistemic blind spots that existing laws fail to address.⁷⁰ Nevertheless, AI regulation faces stiff headwinds from industry lobbyists, AI accelerationists, and regulatory skeptics.⁷¹ Challengers of AI regulation argue that it will stifle AI innovation, undermine social prosperity, and threaten national security.⁷² These claims are

67. See *infra* Section I.C.

68. See MUSTAFA SULEYMAN, *THE COMING WAVE: TECHNOLOGY, POWER, AND THE TWENTY-FIRST CENTURY'S GREATEST DILEMMA* 45 (2023); TOM WHEELER, *TECHLASH: WHO MAKES THE RULES IN THE DIGITAL GILDED AGE?* 56 (2023).

69. See Inioluwa Deborah Raji et al., *The Fallacy of AI Functionality*, 2022 ACM CONF. ON FAIRNESS, ACCOUNTABILITY, & TRANSPARENCY, June 20, 2022, at 959, <https://dl.acm.org/doi/pdf/10.1145/3531146.3533158> [<https://perma.cc/6CKM-SU4P>] (“Deployed AI systems often do not work.”); see also Matteo Wong, *Building AI Safely Is Getting Harder and Harder*, ATLANTIC (Dec. 22, 2023), <https://www.theatlantic.com/newsletters/archive/2023/12/building-ai-safety-is-getting-harder-and-harder/676960/> [<https://perma.cc/78WX-GNEH>].

70. See, e.g., NAT’L TELECOMMS. & INFO. ADMIN., *AI Accountability Policy Report* (Mar. 27, 2024), <https://www.ntia.gov/issues/artificial-intelligence/ai-accountability-policy-report> [<https://perma.cc/6UXM-CNKU>]; Tschider, *supra* note 59, at 330–31 (discussing accountability gaps in the law for AI-related harms).

71. See, e.g., Kevin Roose, *This A.I. Subculture’s Motto: Go, Go, Go*, N.Y. TIMES (Dec. 10, 2023), <https://www.nytimes.com/2023/12/10/technology/ai-acceleration.html> [<https://perma.cc/MFE4-UKYG>] (examining the “Effective Accelerationism” movement and its push for unrestricted AI development); Bruce Schneier & Nathan Sanders, Opinion, *The AI Wars Have Three Factions, and They All Crave Power*, N.Y. TIMES (Sep. 28, 2023), <https://www.nytimes.com/2023/09/28/opinion/ai-safety-ethics-effective.html> [<https://perma.cc/99D3-A2F5>] (discussing a range of political and social worldviews shaping AI policy discourse and competing for dominance).

72. These claims are well rehearsed and rampant. For just a sampling, see Lars Dalseide & Jake Morabito, *States Grapple With AI Regulation Amid Rapid Innovation: How Regulatory Crusades Against AI Could Stifle Innovation, Hinder Economic Growth, and Leave the States Behind in the Tech Revolution*, AM. LEGIS. EXCH. COUNCIL (Jan. 13, 2025), <https://alec.org/article/states-grapple-with-ai-regulation-amid-rapid-innovation/> [<https://perma.cc/VS4U-MJF6>]; COMPUT. & COMM’NS. INDUS. ASS’N, *STATE LANDSCAPE: ARTIFICIAL INTELLIGENCE* 3–4 (Dec. 6, 2024), <https://ccianet.org/library/2024-state-artificial-intelligence-landscape/> [<https://perma.cc/PY46-RSLD>] (warning that overly broad or inconsistent state regulations could hinder innovation, impose costly compliance burdens, and fragment the policy landscape); Tyler Cowen, *New Laws to Regulate AI Would Be Premature*, BLOOMBERG (Oct. 30, 2023, at 02:30 MT), <https://www.bloomberg.com/opinion/articles/2023-10-30/new-laws-to-regulate-ai-would-be-premature> [<https://perma.cc/UC5Q-P2PM>]

highly debatable, but not the immediate focus here. Instead, the discussion below deconstructs a more testable claim: that AI regulation is unnecessary because existing laws already address most AI concerns. This argument is dangerously seductive, full of pretense, and incomplete at best. The entire legal code does not need rewriting. However, there are countless gaps and mismatches between the law on the books and AI in action.

First, accountability for AI-related harms between developers, deployers, or users is complex and unresolved.⁷³ Traditional liability frameworks assume clear causal chains that AI systems obscure.⁷⁴ Moreover, most laws require scienter as an element, such as the intentional or knowing harm to others.⁷⁵ Yet many AI-related harms are unintentional and unknowing, often due to transparency gaps and the distributed nature of responsibility.⁷⁶ These concerns will only be exacerbated when multiple AI systems interact in unanticipated or unintended ways. Courts can and will decide whether and how old laws apply, but that will take years. Lawmakers may want to decide differently and sooner.

Second, the opacity of AI can bedevil traditional enforcement mechanisms.⁷⁷ Unlike conventional technologies, where cause and effect are observable, AI systems often function as black boxes. Beyond technical

(arguing that “market experimentation has the highest return now, when we are debating the best and most appropriate uses for the technology”); Nihal Krishan, *Tech Groups Push Back Biden AI Executive Order, Raising Concerns that it Could Crush Innovation*, FEDSCOOP (Nov. 9, 2023), <https://fedscoop.com/tech-groups-push-back-on-biden-ai-executive-order-raising-concerns-that-it-could-crush-innovation/> [<https://perma.cc/9DTH-B3TB>]; Carl Szabo, *Look Before You Leap to Regulating AI*, NETCHOICE (Aug. 10, 2023), <https://netchoice.org/look-before-you-leap-to-regulating-ai/> [<https://perma.cc/VP8N-Z58H>]; U.S. CHAMBER AI COM.: COMMISSION ON ARTIFICIAL INTELLIGENCE COMPETITIVENESS, INCLUSION, AND INNOVATION: REPORT 4 (2023); Daniel Castro & Michael McLaughlin, *Who Is Winning the AI Race: China, the EU or the United States?*, CTR. FOR DATA INNOVATION (Jan. 25, 2021), <https://datainnovation.org/2021/01/who-is-winning-the-ai-race-china-the-eu-or-the-united-states/> [<https://perma.cc/7JME-GKNL>]; SPECIAL COMPETITIVE STUD. PROJECT, MID-DECADE CHALLENGES TO NATIONAL COMPETITIVENESS 12 (2022).

73. See NAT’L TELECOMMS. & INFO. ADMIN., *supra* note 70, at 18, 23–24.

74. See *id.*; IAN BROWN, ADA LOVELACE INST., *ALLOCATING ACCOUNTABILITY IN AI SUPPLY CHAINS* 6–8 (2023), <https://www.adalovelaceinstitute.org/wp-content/uploads/2023/06/Allocating-accountability-in-AI-supply-chains-June-2023.pdf> [<https://perma.cc/F4XD-AAJ9>]; Kröll et al., *supra* note 38, at 636.

75. See *Scienter*, LEGAL INFO. INST., <https://www.law.cornell.edu/wex/scienter> [<https://perma.cc/NQ6V-QGWZ>] (last visited Aug. 18, 2025) (defining scienter as the “intent or knowledge of wrongdoing,” and noting it “is often required to establish liability in fraud cases and other legal contexts where intent is a crucial element”).

76. See, e.g., Yavar Bathaee, *The Artificial Intelligence Black Box and the Failure of Intent and Causation*, 31 HARV. J.L. & TECH. 889, 905 (2018).

77. See, e.g., PASQUALE, *supra* note 42, at 3–4, 9 (shining critical light on the “black box” nature of algorithmic systems); Dan Hendrycks & Laura Hiscott, *The Misguided Quest for Mechanistic AI Interpretability*, AI FRONTIERS (May 15, 2025), <https://aifrontiersmedia.substack.com/p/the-misguided-quest-for-mechanistic> [<https://perma.cc/5H3C-HZ2H>]; Jenna Burrell, *How the Machine “Thinks”*: *Understanding Opacity in Machine Learning Algorithms*, 3 BIG DATA & SOC’Y, Jan.–June 2016, at 1, 3–5.

inscrutability, AI developers usually choose, for business or security reasons, to keep their code, data sources, and internal evaluations secret. None of this is to suggest wrongdoing.⁷⁸ But when harm is unknown or unprovable, traditional legal remedies become meaningless.⁷⁹

Third, most of our existing law was designed for human-scale problems, not algorithmic ones.⁸⁰ For instance, when a human loan officer discriminates, the harm affects individuals incrementally. When an algorithmic lending system discriminates, it can affect millions. Moreover, AI multiplies the opportunities and number of actors who may cause harm. Today's generative AI systems can translate any user's plain-language goal into code capable of manipulating markets, committing widespread fraud, or executing crippling cyberattacks.⁸¹ While laws exist to criminalize fraudulent and malicious activity in digital realms, the ease of access to AI tools makes it challenging to control their misuse. There are simply too many motivated humans searching for ways to use these tools in unanticipated or unauthorized ways.⁸² The acceleration and dissemination of "agentic AI" systems exacerbate these challenges exponentially.⁸³ Once released into the wild, such

78. See, e.g., PASQUALE, *supra* note 42, at 3–4, 9.

79. See, e.g., *CFPB Acts to Protect the Public from Black-Box Credit Models Using Complex Algorithms*, CONSUMER FIN. PROT. BUREAU: NEWSROOM, (May 26, 2022), <https://www.consumerfinance.gov/about-us/newsroom/cfpb-acts-to-protect-the-public-from-black-box-credit-models-using-complex-algorithms/> [<https://perma.cc/ZY6Y-5AUZ>]; PASQUALE, *supra* note 42, at 3–4, 9 (critiquing secrecy around algorithmic decision-making); Barocas & Selbst, *supra* note 59, at 673–74.

80. Dan Hendycks, Mantas Mazeika & Thomas Woodside, *An Overview of Catastrophic AI Risks*, ARXIV (Oct. 9, 2023), <https://arxiv.org/pdf/2306.12001> [<https://perma.cc/RL4S-7FS9>] (taxonomizing and discussing four categories of risk: "malicious use," "AI race," "Organizational Risk," and "Rogue AIs").

81. See, e.g., Microsoft Threat Intell., *Same Targets, New Playbooks: East Asia Threat Actors Employ Unique Methods*, MICROSOFT SEC. (Apr. 14, 2024), <https://www.microsoft.com/en-us/security/security-insider/intelligence-reports/east-asia-threat-actors-employ-unique-methods> [<https://perma.cc/ER7W-5MBZ>].

82. See, e.g., Miles Brundage et al., *The Malicious Use of Artificial Intelligence: Forecasting, Prevention, & Mitigation*, ARXIV (Feb. 2018), <https://arxiv.org/abs/1802.07228> [<https://perma.cc/DMP5-PWQH>]; Dell Cameron, *Before Las Vegas, Intel Analysts Warned That Bomb Makers Were Turning to AI*, WIRED (Jan. 8, 2025, at 17:35 MT), <https://www.wired.com/story/las-vegas-bombing-cybertruck-trump-intel-dhs-ai/> [<https://perma.cc/9QVY-KHG4>]; Neil Sahota, *The Dark Side of AI Is How Bad Actors Manipulate Minds*, FORBES (July 29, 2024, at 10:00 ET), <https://www.forbes.com/sites/neilsahota/2024/07/29/the-dark-side-of-ai-is-how-bad-actors-manipulate-minds/> [<https://perma.cc/N853-NL52>]; Justin Green & Allie Weintraub, *Experts Warn of Rise in Scammers Using AI to Mimic Voices of Loved Ones in Distress*, ABC NEWS (July 7, 2023, at 13:27 MST), <https://abcnews.go.com/Technology/experts-warn-rise-scammers-ai-mimic-voices-loved/story?id=100769857> [<https://perma.cc/5W93-AZ8A>]; Natasha Singer, *Teen Girls Confront an Epidemic of Deepfake Nudes in Schools*, N.Y. TIMES (Apr. 8, 2024), <https://www.nytimes.com/2024/04/08/technology/deepfake-ai-nudes-westfield-high-school.html> [<https://perma.cc/6P2W-4XE8>].

83. See Ranjan Sapkota et al., *AI Agents vs. Agentic AI: A Conceptual Taxonomy, Applications and Challenges*, ELSEVIER (Aug. 22, 2025), <https://arxiv.org/pdf/2505.10468> [<https://perma.cc/JK95-3WGU>]; Margaret Mitchell et al., *Fully Autonomous AI Agents*

systems might operate autonomously and indefinitely, interacting in complex and potentially highly consequential ways that defy existing legal frameworks.⁸⁴

Last but not least, policymakers may also want to regulate AI to accelerate AI adoption by removing market barriers.⁸⁵ Driverless cars, for example, will not be permitted in jurisdictions that require a human driver.⁸⁶ New laws and regulations will be needed to allow driverless cars to operate, and still more laws to make them safe. Relatedly, government regulations may accelerate AI adoption by reducing market uncertainty and apprehension. Clear guidelines and control mechanisms can reduce fear of negative consequences and build trust in AI technology, which is foundational to its success. For example, AI medical devices hold tremendous promise for personalizing and revolutionizing healthcare.⁸⁷ However, those benefits will only be realized if doctors trust and prescribe such devices.⁸⁸ More generally, widespread adoption of AI depends on widespread public trust that the technology is reliable, safe, and effective—none of which should be taken for granted.⁸⁹ As put by the National Security Commission on Artificial Intelligence, if AI systems violate civil rights or “have significant negative consequences, then leaders will not adopt them, operators will not use them, Congress will not fund them, and the American people will not support them.”⁹⁰

Should Not Be Developed, ARXIV (Feb. 6, 2025), <https://arxiv.org/pdf/2502.02649> [<https://perma.cc/RU2A-NCUC>].

84. See Noam Kolt, *Governing AI Agents*, 101 NOTRE DAME L. REV. (forthcoming 2025) (manuscript at 4), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4772956 [<https://perma.cc/J9GW-N2MS>].

85. Cf. ROBERT BALDWIN, MARTIN CAVE & MARTIN LODGE, UNDERSTANDING REGULATION: THEORY, STRATEGY, AND PRACTICE 3 (2d ed. 2012) (“[R]egulation is often thought of as an activity that restricts behavior and prevents the occurrence of certain undesirable activities . . . [but] the influence of regulation may also be enabling or facilitative . . .”).

86. See, e.g., CAL. VEH. CODE § 305 (West 2024) (defining a “driver” as a “person who drives or is in actual physical control of a vehicle”); *Autonomous Vehicles Legislation Database*, NAT’L CONF. OF STATE LEGISLATURES (Mar. 10, 2025), <https://www.ncsl.org/transportation/autonomous-vehicles-legislation-database> [<https://perma.cc/9MYS-YJA9>] (collecting state legislation pertaining to the testing and operation of autonomous vehicles).

87. See, e.g., Troy Tazbas, *Blog: The Promise Artificial Intelligence Holds for Improving Health Care*, U.S. FOOD & DRUG ADMIN. (July 25, 2024), <https://www.fda.gov/medical-devices/digital-health-center-excellence/blog-promise-artificial-intelligence-holds-improving-health-care> [<https://perma.cc/WGH6-ZDFG>].

88. Reportedly, the absence of regulation has led doctors to reject AI technologies not subject to strict clinical protocols. See Christina Jewett, *Doctors Wrestle with AI In Patient Care, Citing Lax Oversight*, N.Y. TIMES (Oct. 30, 2023), <https://www.nytimes.com/2023/10/30/health/doctors-ai-technology-health-care.html> [<https://perma.cc/AA6A-DWXM>].

89. According to a 2023 Pew Research Center survey, 52% of Americans feel more concerned than excited about AI’s role in daily life, while only 10% are more excited than concerned. See Alec Tyson & Emma Kikuchi, *Growing Public Concern About the Role of Artificial Intelligence in Daily Life*, PEW RSCH. CTR. (Aug. 28, 2023), <https://www.pewresearch.org/short-reads/2023/08/28/growing-public-concern-about-the-role-of-artificial-intelligence-in-daily-life/> [<https://perma.cc/JU93-7WMJ>].

90. NSCAI REPORT, *supra* note 2, at 133.

Government agencies and litigants can try to *stretch* existing statutes to fit AI.⁹¹ However, those interpretations will be judicially challenged by affected stakeholders. In many cases, those legal challenges will be orchestrated by the very same actors insisting, today, that existing laws cover AI-related harms.⁹² This contradiction is more than ironic; it reveals the weakness of the existing-laws-suffice argument, if not also the motivations behind it. Rather than wait, policymakers may think it better to clarify how existing laws apply—and don't apply—to modern AI technologies.⁹³

The mismatch between industrial-era law and algorithmic-era technologies calls for thoughtful recalibration. No prior technology can mimic human communication, create more powerful versions of itself, or exceed human performance on knowledge-based tasks. Of course, AI is not entirely unique. Like other computer technologies, AI is software that operates over the internet. Moreover, AI crunches numbers like a calculator. It operates at speed and scale like electricity, and, like a hammer, can be wielded for both construction and destruction. What makes AI different is the confluence of the foregoing affordances. Indeed, that “AI is like” so many things only reinforces that it is also like none of them.⁹⁴

The surge of political interest may or may not yield meaningful regulation.⁹⁵ However, it speaks volumes about AI's unique technical attributes, its

91. Cf. Joint Statement on Enforcement Efforts Against Discrimination and Bias in Automated Systems, 1–2 (2023), https://www.ftc.gov/system/files/ftc_gov/pdf/EEOC-CRT-FTC-CFPB-AI-Joint-Statement%28final%29.pdf [<https://perma.cc/L54K-6KEN>] (statement by the federal agency officials from the Consumer Financial Protection Bureau, Department of Justice, Equal Employment Opportunity Commission, and Federal Trade Commission, arguing that “[e]xisting legal authorities apply to the use of automated systems and innovative new technologies just as they apply to other practices”).

92. See, e.g., Krista Chavez, *Biden Releases AI Red Tape Wishlist in New Executive Order*, NETCHOICE (Oct. 30, 2023), <https://netchoice.org/biden-releases-ai-red-tape-wishlist-in-new-executive-order/> [<https://perma.cc/H6PJ-CN4N>] (quoting NetChoice Vice President and General Counsel); Chamber of Com. of the U.S., Comment Letter on Trade Regulation Rule on Commercial Surveillance and Data Security, at 2 (Nov. 21, 2022) (“Biden’s new executive order is a back-door regulatory scheme for the wider economy which uses AI concerns as an excuse to expand the President’s power over the economy.”), https://www.uschamber.com/assets/documents/221121_Comments_CommercialSurveillanceDataSecurity_FTC.pdf [<https://perma.cc/V3N8-C3XR>] (arguing that the Federal Trade Commission’s contemplated rule for data privacy and AI would violate the major questions doctrine).

93. Cf. David D. Friedman, *Does Technology Require New Law?*, 25 HARV. J.L. & PUB. POL’Y 71, 71 (2001) (arguing that technological change may alter enforcement costs, justifications for existing rules, or underlying factual assumptions sufficiently to require new legal rules); Frank H. Easterbrook, *Cyberspace and the Law of the Horse*, 1996 U. CHI. LEGAL F. 207, 207–08 (famously arguing against the need for specialized rules and legal fields in response to new technologies).

94. See, e.g., MATTHIJS M. MAAS, AI IS LIKE . . . A LITERATURE REVIEW OF AI METAPHORS AND WHY THEY MATTER FOR POLICY, AI FOUNDATIONS REPORT 2 (Oct. 2023) (canvassing a range of AI metaphors); cf. Michael Froomkin, *The Metaphor is the Key: Cryptography, the Clipper Chip, and the Constitution*, 143 U. PA. L. REV. 709, 860–61 (1995) (“The law’s first reaction to a new technology is to reach for analogies . . .”).

95. See *infra* Part II (discussing policy initiatives at federal and state levels).

sprawling social implications, and the need to rethink how existing laws apply or not. Left unregulated, industry choices and market forces operate as a de facto AI policy. Most industry stakeholders prefer it this way, understandably so. Yet federalism accommodates opposing views and much else in between.

C. How to Regulate AI?

Leaders from both political parties have emphasized the need to harness AI's significant benefits and mitigate its associated risks.⁹⁶ This is a laudable goal, but it is as ambiguous as it is ambitious. Striking a balance often depends on specific contexts, including the severity and likelihood of the risks, who bears them, and value judgments about how risks should be allocated and redressed. Policymakers must also account for competing interests between capital and labor, privacy and security, economic growth and equity, permissionless innovation and government regulation.⁹⁷

Still more, AI's promises and perils are hard to decouple. Just for example, law enforcement can deploy facial recognition systems to find lost children and terrorists, but they can also be used for Orwellian surveillance and social repression.⁹⁸ An AI system that can cure human diseases could also generate formulas for new diseases and other biological threats.⁹⁹ The list goes on. When viewed in this context, the mantra of maximizing AI benefits and mitigating its risk is at best a political placeholder, and it is losing luster. What comes next is the hard part.

96. See, e.g., JAY OBERNOLTE ET AL., BIPARTISAN HOUSE TASK FORCE REPORT ON ARTIFICIAL INTELLIGENCE iii (2024) [hereinafter HOUSE AI REPORT] (emphasizing the need for a regulatory approach that balances the need to promote vibrant AI innovation while safeguarding Americans from potential harms"); CHUCK SCHUMER ET AL., BIPARTISAN SENATE AI WORKING GROUP, A ROADMAP FOR ARTIFICIAL INTELLIGENCE POLICY IN THE U.S. SENATE [hereinafter SENATE AI ROADMAP] (emphasizing the need to "harness the opportunities and address the risks of this transformational technology"); Exec. Order No. 14,110, *supra* note 16, at 75191 (stating that AI "holds extraordinary potential for both promise and peril . . . Harnessing AI for good and realizing its myriad benefits requires mitigating its substantial risks"); Scott Kawasaki et al., *Open Letter: Why Now is the Time to Act on US State AI Legislation*, INT'L ASS'N OF PRIV. PROS. (Dec. 12, 2024) [hereinafter Multistate Working Group, Open Letter], <https://iapp.org/news/a/open-letter-why-now-is-the-time-to-act-on-us-state-ai-legislation> [<https://perma.cc/ME59-YP88>] ("Now is the time to act—by working together, we can ensure AI serves the public good while protecting society from its dangers.").

97. See *supra* Section I.C.

98. See Clare Garvie & Laura M. Moy, *America Under Watch: Face Surveillance in the United States*, GEO. L. CTR. PRIV. & TECH. (May 16, 2019), <https://www.americaunderwatch.com/> [<https://perma.cc/NY8A-8JH5>] ("When used on public gatherings, face surveillance may have a chilling effect on our First Amendment rights to unabridged free speech and peaceful assembly."); see generally GEORGE ORWELL, NINETEEN-EIGHTY FOUR (1949) (depicting a canonical surveillance state).

99. See Sarah Morgan, *The Double-Edged Sword: Opportunities and Risks of AI in Biosecurity*, GEO. SEC. STUD. REV. (Nov. 15, 2024), <https://gssr.georgetown.edu/the-forum/topics/biosec/the-double-edged-sword-opportunities-and-risks-of-ai-in-biosecurity/> [<https://perma.cc/RQN3-6DMG>].

Policymakers must navigate multiple regulatory dimensions simultaneously. Should regulation target the upstream developers of AI models, midstream vendors and deployers, or downstream users, and in which contexts or combinations?¹⁰⁰ Should laws be enacted in sectoral silos or harmoniously across sectors?¹⁰¹ Should governance emphasize *ex ante* requirements, such as impact assessments and transparency, or rely on *ex post* liability and remedies?¹⁰² Should regulations take a risk-based approach focused on harm prevention, or a rights-based approach centered on individual protections?¹⁰³ Should regulations take a technology-neutral or application-specific approach?¹⁰⁴ Should governance responsibilities rest primarily with government bodies or industry self-regulation?¹⁰⁵ Effective AI regulation requires not only the development of appropriate rules but also their enforcement, the establishment of mechanisms for holding stakeholders accountable, and the allocation of resources.¹⁰⁶

100. See, e.g., Sophie Williams, Jonas Schuett & Markus Anderljung, *On Regulating Downstream AI Developers*, CTR. FOR THE GOVERNANCE OF AI 1–3 (Mar. 14, 2025), https://cdn.governance.ai/On_Regulating_Downstream_AI_Developers.pdf [<https://perma.cc/Q9UK-LHA7>]; see also Dean W. Ball & Alan Z. Rozenshtein, *Congress Should Preempt State AI Safety Legislation*, LAWFARE (June 17, 2024, at 14:00), <https://www.lawfaremedia.org/article/congress-should-preempt-state-ai-safety-legislation> [<https://perma.cc/M28F-EKCE>] (distinguishing between model-level and deployment-level AI, and arguing that states should not regulate AI models).

101. See, e.g., HOUSE AI REPORT, *supra* note 96, at vii (discussing the difference and expressing support for a sector-specific approach).

102. See Markus Anderljung et al., *Frontier AI Regulation: Managing Emerging Risks to Public Safety*, ARXIV 23–29 (Nov. 7, 2023), <https://arxiv.org/pdf/2307.03718> [<https://perma.cc/T2F5-RKBA>]; Martin Kretschmer, *The Risks of Risk-Based AI Regulation: Taking Liability Seriously*, ARXIV (Nov. 3, 2023), <https://arxiv.org/pdf/2311.14684> [<https://perma.cc/S6G9-CURG>]; Matthijs M. Maas, *Regulating for ‘Normal AI Accidents’: Operational Lessons for the Responsible Governance of Artificial Intelligence Deployment*, PROCS. OF 2018 AAAI/ACM CONF. ON AI, ETHICS, & SOC’Y 223 (2018) (examining principles for precautionary policymaking and practical recommendations for AI safety regulation).

103. Margot E. Kaminiski, *The Developing Law of AI Regulation: A Turn to Risk Regulation*, LAWFARE: THE DIGIT. SOC. CONT. 13–14 (Apr. 21, 2023, at 13:23), <https://s3.documentcloud.org/documents/24767725/the-developing-law-of-ai-kaminski.pdf> [<https://perma.cc/Q9RU-Q536>] (comparing risk-based and rights-based approaches to AI regulation).

104. See Chris Reed, *Taking Sides on Technology Neutrality*, 4 SCRIPT-ED 263, 264 (2007).

105. This choice often manifests in the choice between hard- and soft-law instruments. Whereas hard law creates binding obligations backed by state power, soft law encompasses nonbinding government guidelines, industry standards, and government incentives. See Gary E. Marchant & Carlos Ignacio Gutierrez, *Soft Law 2.0: An Agile and Effective Governance Approach for Artificial Intelligence*, 24 MINN. J.L. SCI. & TECH. 375, 384–85 (2023); see also Cary Coglianese & Evan Mendelson, *Meta-Regulation and Self-Regulation*, in THE OXFORD HANDBOOK OF REGULATION 146, 150–53 (Robert Baldwin et al. eds., 2010) (discussing how the choice between government regulation and self-regulation depends on various factors including risk assessment, stakeholder impacts, and societal values).

106. See NAT’L TELECOMMS. & INFO. ADMIN., *supra* note 70; Chinmayi Sharma & Alan Z. Rozenshtein, *Regulatory Approaches to AI Liability*, LAWFARE (Sep. 24, 2024, at

The foregoing considerations are by no means exhaustive. Nor are the tradeoffs always stark. In practice, the elements of regulatory design are often matters of degree. For instance, they can be light-touch or heavy-handed.¹⁰⁷ Moreover, regulatory features can be hybridized and contextualized—for example, a risk-based approach for some applications or sectors, and a rights-based approach for others.¹⁰⁸ Ultimately, regulating AI presents a complex matrix of possibilities. Given the range of options and competing interests at play, we should not expect (nor necessarily want) a uniform approach or single institution to decide.

D. When to Regulate AI?

Assuming regulation is desired, there is still the crucial question of when. The potential risks and impacts are often unknown or unknowable at the early stages of a technology's development.¹⁰⁹ This is especially true for budding technologies like AI, which offer tremendous economic and social potential that may be lost, to some extent, by overly restrictive or premature regulation.¹¹⁰ A wait-and-see approach, by contrast, may benefit from gathering further information, conducting observations, and engaging in reflection.¹¹¹ In the meantime, however, technology may cause harm that could have been avoided and may be hard to redress. Moreover, after a technology is broadly adopted and entrenched in products, workflows, business models, and infrastructure, regulatory measures that may have been

08:00 MT), <https://www.lawfaremedia.org/article/regulatory-approaches-to-ai-liability> [<https://perma.cc/JGB6-RP8H>].

107. See, e.g., Cary Coglianese & David Lehr, *Transparency and Algorithmic Governance*, 71 ADMIN. L. REV. 1, 7–10 (2019) (discussing various light-touch regulatory approaches for AI, focusing on transparency and reporting requirements).

108. The European Union's AI Act, signed into law in 2024, is a prime example of a mix-and-match approach. See Regulation (EU) 2024/1689, of the European Parliament and of the Council of 13 June 2024 Laying Down Harmonised Rules on Artificial Intelligence and Amending Regulations (EC) No 300/2008, (EU) No 167/2013, (EU) No 168/2013, (EU) 2018/858, (EU) 2018/1139 and (EU) 2019/2144 and Directives 2014/90/EU, (EU) 2016/797 and (EU) 2020/1828 (Artificial Intelligence Act), 2024 O.J. (L 310); Sandra Wachter, *Limitations and Loopholes in the EU AI Act and AI Liability Directives: What This Means for the European Union, the United States, and Beyond*, 26 YALE J.L. & TECH. 671, 677–83 (2024) (detailing the EU's hybrid approach to AI regulation).

109. DAVID COLLINGRIDGE, *THE SOCIAL CONTROL OF TECHNOLOGY* 11 (1980); see also Wolfgang Liebert & Jan C. Schmidt, *Collingridge's Dilemma and Technoscience*, 7 POIESIS & PRAXIS 55, 57 (2010) (discussing the dilemma and its application).

110. See Adam Thierer, *The Pacing Problem and the Future of Technology Regulation*, MERCATUS CTR. (Aug. 8, 2018), <https://www.mercatus.org/economic-insights/expert-commentary/pacing-problem-and-future-technology-regulation> [<https://perma.cc/ET8N-D27L>]; Ryan Hagemann, Jennifer Huddleston Skees & Adam Thierer, *Soft Law for Hard Problems: Governance of Emerging Technologies in an Uncertain Future*, 17 COLO. TECH. J. 37, 40 (2018).

111. See Tim Wu, *In Regulating A.I., We May Be Doing Too Much. And Too Little*, N.Y. TIMES (Nov. 7, 2023), <https://www.nytimes.com/2023/11/07/opinion/biden-ai-regulation.html> [<https://perma.cc/U65C-4DDY>].

available earlier may no longer be commercially, politically, or logistically feasible.¹¹²

This is a familiar problem for emergent technologies, captured in the eponymous “Collingridge dilemma.”¹¹³ The horns of the dilemma are particularly acute for AI technologies. First, AI is being integrated throughout society at a blistering pace—much faster than prior technologies.¹¹⁴ Proactive regulation, in most instances, is probably not the first-best option. But for AI, it might be, given the velocity with which it is being developed and deployed into real-world, high-stakes contexts.¹¹⁵ Second, the opacity and complexity of AI systems make it challenging to design effective regulations.¹¹⁶ These tensions will only swell as AI becomes further embedded in critical infrastructure, public services, and decision-making contexts, which may implicate legal rights and life opportunities.¹¹⁷

Regulating under uncertainty is not unique to AI, but the stakes are especially pronounced in both directions.¹¹⁸ Technology approved as safe and ethical today could evolve into something far more menacing tomorrow. Meanwhile, premature overregulation based on exaggerated risks could limit

112. See Rebecca Crootof & BJ Ard, *Structuring Techlaw*, 34 HARV. J.L. & TECH. 347, 355 (2021) (discussing how “path dependence, lock-in, and stabilization make shifting the course of both law and future technological development more difficult”).

113. See COLLINGRIDGE, *supra* note 109; see also Gary E. Marchant, *The Growing Gap Between Emerging Technologies and the Law*, in THE GROWING GAP BETWEEN EMERGING TECHNOLOGIES AND LEGAL-ETHICAL OVERSIGHT: THE PACING PROBLEM 19 (Gary E. Marchant et al. eds., 2011) (“[T]he legal frameworks that society relies on to regulate and manage emerging technologies have not evolved as rapidly [as the technologies themselves].”).

114. See Alicia Solow-Niederman, *Administering Artificial Intelligence*, 93 S. CAL. L. REV. 633, 656 (2020) (discussing the “pacing problem” in the AI context); Andrew R. Chow, *How ChatGPT Managed to Grow Faster Than TikTok or Instagram*, TIME (Feb. 8, 2023), at 4:40 ET, <https://time.com/6253615/chatgpt-fastest-growing/> [<https://perma.cc/7YSX-DYA2>].

115. See, e.g., *AI Statistics 2024–2025: Global Trends, Market Growth & Adoption Data*, FOUNDERS F. GRP. (June 23, 2025), <https://ff.co/ai-statistics-trends-global-market/> [<https://perma.cc/SCD8-KJ65>] (noting that AI “has moved from theoretical promise to real-world application at a pace unlike any other technology in modern history”); Alex Singla et al., *The Next Innovation Revolution—Powered by AI*, MCKINSEY & CO. (June 20, 2025), <https://www.mckinsey.com/capabilities/quantumblack/our-insights/the-next-innovation-revolution-powered-by-ai> [<https://perma.cc/K682-HZW4>] (noting the spike in organizations using AI since 2023).

116. Cf. Nathan Cortez, *Regulating Disruptive Innovation*, 29 BERKELEY TECH. L.J. 175, 179–81 (2014) (analyzing the challenges of regulating emerging technologies and the tendency towards regulatory restraint).

117. See, e.g., ANAND S. RAO & GERARD VERWEIJ, *SIZING THE PRIZE: WHAT’S THE REAL VALUE OF AI FOR YOUR BUSINESS AND HOW CAN YOU CAPITALISE?*, PWC 3–4 (Jan. 20, 2025), <https://www.pwc.com/gx/en/issues/analytics/assets/pwc-ai-analysis-sizing-the-prize-report.pdf> [<https://perma.cc/6HW2-B3RW>] (estimating that AI will help generate \$15.7 trillion in economic development).

118. See Wu, *supra* note 111 (warning of the risks of regulating AI too soon and too late).

economic prosperity and hinder innovation in vital domains.¹¹⁹ Policymakers may weigh these risks differently and act accordingly. Some jurisdictions may view AI regulation as too complex or fraught, while others may grasp the policymaking mantle. For present purposes, what matters is the interplay of multiple jurisdictions acting on different timescales.

E. Who Decides?

The preceding discussion introduced a range of first-order questions: what to regulate, how to regulate, and when. This concluding Section turns to second-order questions of who decides. This is arguably the most critical question because the answers will shadow and shape all the others. Who decides AI policy can influence the transparency of the decision-making process, the interests considered, and the speed of decisions. The question of who decides is also intrinsic to the legitimacy and authority of whatever policies emerge.¹²⁰ Due to different priorities, procedures, and political communities, government institutions are able, and sometimes eager, to promote competing visions of the public good. In our constitutional democracy, government policies often differ across branches, jurisdictions, and levels of government.¹²¹

Start with Congress. To become federal “Law,”¹²² a statutory proposal must survive the constitutional rigors of bicameralism and presentment.¹²³ What’s more, statutory proposals must also survive many “vetogates” erected by the rules and customs of both chambers of Congress.¹²⁴ Each vetogate, such as the Senate filibuster, presents an opportunity for opposing legislators to kill a bill.¹²⁵ Unlike

119. *See id.*; *see also supra* note 72 and accompanying text (collecting sources warning of the dangers of overregulating AI).

120. *See* Richard H. Fallon, Jr., *Legitimacy and the Constitution*, 118 HARV. L. REV. 1787, 1789 (2005) (arguing that “constitutional legitimacy” is a complex concept that intertwines constitutional law and its sociological foundations, as well as perceptions of practical exigency and of moral right); *see also* Miriam Seifter, *States, Agencies, and Legitimacy*, 67 VAND. L. REV. 443, 481 (2014) (analyzing questions of institutional choice through a legitimacy lens); TOM R. TYLER, *WHY PEOPLE OBEY THE LAW* 4 (2006) (finding that when legal authorities are perceived as legitimate and fair, people are more likely to comply with their decisions).

121. *See* THE FEDERALIST NO. 51, at 323 (James Madison) (Clinton Rossiter ed., 1961) (arguing that the “double security” of separated powers and federalism safeguards “the rights of the people”); *Youngstown Sheet & Tube Co. v. Sawyer*, 343 U.S. 579, 635 (1952) (Jackson, J., concurring) (articulating that the Constitution “enjoins upon its branches separateness but interdependence, autonomy but reciprocity”); *Gregory v. Ashcroft*, 501 U.S. 452, 458 (1991) (emphasizing the traditional values of federalism).

122. *See* U.S. CONST. art. I, § 7 (establishing requirements for enacting federal “Law”).

123. *See* *INS v. Chadha*, 462 U.S. 919, 951 (1983) (affirming “the Framers’ decision that the legislative power . . . be exercised in accord with a single, finely wrought and exhaustively considered, procedure”).

124. *See* William N. Eskridge Jr., *Vetogates and American Public Law*, 31 J.L. ECON. & ORG. 756, 757 (2015) (describing the stages in the legislative process where a proposal can be defeated or amended by a minority);

125. *See id.* at 757–61; *STANDING RULES OF THE SENATE*, S. DOC. NO. 113–18, R. XXII, at 15–17 (2013).

Congress, a President does not have inherent lawmaking authority.¹²⁶ However, the President plays a central role in directing and overseeing federal policy through formal and informal levers of power.¹²⁷ One key tool in this regard is the executive order—a directive issued to executive branch officials to manage operations within the federal government.¹²⁸

While executive orders can have significant implications for public policy, they cannot directly create legal obligations or rights for private actors unless supported by existing statutory or constitutional authority.¹²⁹ Compared to congressional statutes, presidential policy is easier to amend or reverse.¹³⁰ The transition from the first Trump Administration to the Biden Administration, and back to the second Trump Administration, crystallizes the fragility and political turbulence of presidential AI policies that lack legal entrenchment.¹³¹

Below the President, federal agencies implement the bulk of federal law. However, an agency “literally has no power to act . . . unless and until Congress confers power upon it.”¹³² Although every agency is different, many have the power to issue binding regulations, engage in administrative adjudication, conduct investigations, bring enforcement actions, or some combination thereof.¹³³ Compared to Congress, agencies face fewer procedural hurdles and can generally enact policies on shorter time scales.¹³⁴ Beyond procedural differences, the shift from Congress to agencies alters the political communities that might hold these institutions accountable.¹³⁵ Agency officials are not elected and have no political constituencies. To varying degrees, and in various ways, agencies are accountable

126. See *Youngstown*, 343 U.S. at 587 (“[T]he President’s power to see that the laws are faithfully executed refutes the idea that he is to be a lawmaker.”).

127. Elena Kagan, *Presidential Administration*, 114 HARV. L. REV. 2245, 2246–47 (2001) (discussing formal and informal presidential control over executive agencies). The power to enforce and implement the law is inherent in the President’s vested “executive” power, U.S. CONST. art. II, § 1, and constitutional duty to “take Care that the Laws be faithfully executed,” *id.* § 3.

128. See *Minnesota v. Mille Lacs Band of Chippewa Indians*, 526 U.S. 172, 188–89 (1999) (citing “black letter law” that executive orders “must stem either from an act of Congress or from the Constitution itself”).

129. See ABIGAIL A. GRABER, CONG. RSCH. SERV., R46738, EXECUTIVE ORDERS: AN INTRODUCTION 4 (2021); KENNETH R. MAYER, WITH THE STROKE OF A PEN: EXECUTIVE ORDERS AND PRESIDENTIAL POWER 34–36 (2001).

130. See GRABER, *supra* note 129, at i (“Although executive orders can be flexible and powerful, they can also be impermanent because a later President can, generally, revoke or modify any previously issued executive order with which he disagrees.”).

131. See *infra* Subsection II.A.2 (discussing swings in presidential AI agendas).

132. *La. Pub. Serv. Comm’n v. FCC*, 476 U.S. 355, 374 (1986).

133. See, e.g., Gary S. Lawson, *The Rise and Rise of the Administrative State*, 107 HARV. L. REV. 1231, 1233–41 (1994) (arguing that administrative agencies often combine legislative, executive, and judicial functions); see also Sharma & Rozenstein, *supra* note 106 (discussing these agency functions in the AI context).

134. See, e.g., Kagan, *supra* note 127, at 2339.

135. See Gillian E. Metzger, *The Supreme Court, 2016 Term—Foreword: 1930s Redux: The Administrative State Under Siege*, 131 HARV. L. REV. 1, 77–78 (2017).

to the President. However, the President's constituency is national, not local, which is an important consideration for AI federalism.¹³⁶

Compared to Congress, state legislatures often face fewer procedural hurdles and may operate with greater ideological cohesion.¹³⁷ While states are polarized, the vast majority of them lean heavily Republican *or* Democratic.¹³⁸ Moreover, states have their own political proclivities, capacities, and government structures.¹³⁹ For example, direct democracy is available at the state level but nonexistent at the federal level.¹⁴⁰

The Judiciary, too, will be an AI-policy decider. Courts will decide how general laws, like negligence and consumer protection, apply to AI-related harm. Courts will also decide how to apply administrative law and federalism doctrines in contexts with no clear answers. Because courts will be operating in the interstices and margins of existing law, judges will unavoidably be policymakers, fact finders, and legal referees in the emerging regulatory landscape.

136. See Jessica Bulman-Pozen, *Administrative States: Beyond Presidential Administration*, 98 TEX. L. REV. 265, 265, 299–308 (2019) (examining the dynamics of executive federalism and the ways that states implement, shape, and resist presidential agendas).

137. BRENNEN & SANDERSON, *supra* note 8, at 12–13 (comparing the federal and state legislative process and the concentration of political control by one party or the other at the state level).

138. See *State Government Trifectas*, BALLOTPEDIA, https://ballotpedia.org/State_government_trifectas [<https://perma.cc/939N-Q6KU>] (last visited Oct. 20, 2025) (reporting 40 state trifectas in 2024 and 38 in 2025).

139. See Bulman-Pozen, *Partisan Federalism*, *supra* note 13, at 1082–83 (discussing how state governments can pursue different policy agendas based on their unique political landscapes and institutional structures); Ernest A. Young, *A Research Agenda for Uncooperative Federalists*, 48 TULSA L. REV. 427, 445 (2013) (referencing “public opinion research indicating that a person’s state is a strong predictor of partisan and ideological affiliation, even after controlling for economic, demographic, and similar factors”). *But cf.* Edward L. Rubin, *Puppy Federalism and the Blessings of America*, 574 ANNALS AM. ACAD. POL. & SOC. SCI. 37, 45–46 (2001) (arguing that “[r]egional differences between different parts of the nation are minimal, and those that exist are based on inevitable economic variation rather than any historical or cultural distinctions”).

140. See John Dinan, *State Constitutional Initiative Processes and Governance in the Twenty-First Century*, 19 CHAP. L. REV. 61, 61–62 (2016) (examining the prevalence and impact of direct democracy mechanisms in state governance). Other key differences between national and state lawmaking involve the composition of legislative actors, the length and frequency of legislative sessions, and staffing budgets. All of these differences have implications for how state law is made, how it diffuses among the states, and the ability of external policy advocates to influence legislative outcomes within and across states. *See, e.g.*, Charles W. Tyler & Heather K. Gerken, *The Myth of the Laboratories of Democracy*, 122 COLUM. L. REV. 2187, 2204–22 (2022) (examining the role of “policy demanders” in overcoming limitations in state resources and domain expertise); *see also* Adam S. Zimmerman, *Ghostwriting Federalism*, 133 YALE L.J. 1802, 1839–57 (2024) (studying how federal agencies facilitate and influence state-level legislative action).

II. DAWN OF AI FEDERALISM

This Part provides a snapshot of AI federalism today with an eye toward the future. The current AI policy landscape presents a striking contrast: federal reluctance to regulate alongside robust state-level oversight. More than circumstantial or chimerical, this portrait reflects structural dynamics within our federalist system that will shape AI regulation for years to come.

Section A discusses regulatory initiatives and frictions at the federal level. It also considers how recent developments at the Supreme Court may impact federal AI policy, especially the major questions doctrine and the overruling of *Chevron* deference.¹⁴¹ Section B turns to the states. It maps the current landscape and anticipates trends. To thicken the account, Section C presents a set of case studies. These studies provide an early glimpse of AI federalism in its nascency. Moreover, they help to illustrate, in Section D, why the traditional values of federalism are worth valuing in the AI era.

A. National Policy

At present, no coherent or comprehensive body of federal AI law exists. Instead, as explained below, the federal approach has emphasized voluntary guidelines, industry standards, and a preference for a market-driven regulatory environment that fosters innovation.

1. Congress

The release of ChatGPT in late 2022 was a congressional wake-up call.¹⁴² In 2023 and 2024, the 118th Congress considered more than 120 AI-related bills,¹⁴³ convened more than 100 hearings focused on AI,¹⁴⁴ and published bipartisan AI reports setting forth high-level legislative frameworks.¹⁴⁵ The spectrum of hearings and legislative proposals reflect the breadth of AI's transformative implications across industries, markets, and institutions.¹⁴⁶ Despite all the attention—or perhaps because of it—the 118th Congress failed to enact any laws to regulate AI in the *private* market. Rather, Congress has enacted a handful of laws to fund AI research and development, establish task forces, and promote in-house capacity and training

141. See *infra* Subsection II.A.3.

142. See, e.g., Cecilia Kang & Adam Satariano, *As A.I. Booms, Lawmakers Struggle to Understand the Technology*, N.Y. TIMES (Mar. 3, 2023), <https://www.nytimes.com/2023/03/03/technology/artificial-intelligence-regulation-congress.html> [<https://perma.cc/2LFT-P673>].

143. See *Artificial Intelligence Legislation Tracker*, BRENNAN CTR. FOR JUST. (Sep. 26, 2025), <https://www.brennancenter.org/our-work/research-reports/artificial-intelligence-legislation-tracker> [<https://perma.cc/CXD6-ZNTA>] (tracking federal bills in the 118th Congress); MULTISTATE.AI Tracker, *supra* note 8 (tracking federal and state bills).

144. See *AI Watch: Global Regulatory Tracker – United States*, WHITE & CASE (Sep. 24, 2025) [hereinafter WHITE & CASE, *AI Watch*], <https://www.whitecase.com/insight-our-thinking/ai-watch-global-regulatory-tracker-united-states> [<https://perma.cc/TVK6-NJTH>] (discussing legislative hearings in 118th Congress); Gabby Miller, *US Senate AI 'Insight Forum' Tracker*, TECH POL'Y PRESS (Dec. 8, 2023), <https://www.techpolicy.press/us-senate-ai-insight-forum-tracker/> [<https://perma.cc/B22X-LGDT>].

145. HOUSE AI REPORT, *supra* note 96, at iii; SENATE AI ROADMAP, *supra* note 96.

146. See *supra* notes 144–45.

within the government.¹⁴⁷ These initiatives are essential, and nothing here suggests otherwise. But there is far more road ahead than behind, and it is much steeper, too. It is one thing when a government governs itself and quite another when it governs private institutions.

The 119th Congress has inherited this unfinished business.¹⁴⁸ To start, Congress must determine what to decide, what to delegate, and to whom. Also undecided is whether to regulate sector by sector or harmoniously, whether to take a technology-neutral or application-based approach, whether to adopt a risk-based or rights-based approach, and so on.¹⁴⁹ Funding levels, resources, and enforcement mechanisms will also need to be hashed out.¹⁵⁰ For at least a decade, similarly complex issues have plagued Congress's efforts to pass comprehensive data privacy legislation.¹⁵¹ Time and again, its efforts collapsed under intense opposition from industry groups, including the U.S. Chamber of Commerce and technology trade associations.¹⁵² Despite overwhelming public support for a national privacy law,

147. See, e.g., National Defense Authorization Act for Fiscal Year 2024, Pub. L. No. 118-31, § 214, 137 Stat. 136, 184 (2023) (authorizing funding for AI research and development in the Department of Defense and national research laboratories); Artificial Intelligence Training for the Acquisition Workforce Act, Pub. L. No. 117-207, § 2(b)(1), 136 Stat. 2238, 2239 (2022) (requiring the Office of Management and Budget to provide AI training opportunities for federal employees); AI in Government Act of 2020, Pub. L. No. 116-260, div. U, tit. I, § 105, 134 Stat. 2286, 2289 (2020); John S. McCain National Defense Authorization Act for Fiscal Year 2019, Pub. L. No. 115-232, § 238, 132 Stat. 1636, 1695–97 (2018) (establishing joint artificial intelligence research, development, and transition activities within the Department of Defense); AI in Government Act of 2020, Pub. L. No. 116-260, div. U, tit. I, § 103, 134 Stat. 2286, 2287–88 (codified at 40 U.S.C. § 11301) (establishing the AI Center of Excellence within the General Services Administration); National Artificial Intelligence Initiative, 15 U.S.C. § 9411 (2024) (expanding AI research and development and establishing the National Artificial Intelligence Initiative Office); see also CHIPS and Science Act of 2022, Pub. L. No. 117-167, 136 Stat. 1366, §§ 102–103, 10232, 10387 (promoting AI research and development directly through programs at the National Institute for Science and Technology and National Research Foundation, as well as indirectly through semiconductor manufacturing subsidies).

148. See *supra* Section I.C (canvassing an array of regulatory modalities for regulating AI).

149. See HOUSE AI REPORT, *supra* note 96 (favoring a sectoral approach to AI regulation).

150. See *supra* Section I.C (canvassing a range of regulatory possibilities, all of which are contestable and require tradeoffs).

151. See STEPHEN P. MULLIGAN & CHRIS D. LINEBAUGH, CONG. RSCH. SERV., IF11207, DATA PROTECTION & PRIVACY LAW 2 (2022); Cameron F. Kerry et al., *Bridging the Gaps: A Path Forward to Federal Privacy Legislation*, BROOKINGS INST. 4–5 (2020), https://www.brookings.edu/wp-content/uploads/2020/06/Bridging-the-gaps_a-path-forward-to-federal-privacy-legislation.pdf [<https://perma.cc/5SX7-3MSW>] (analyzing the challenges and potential solutions for achieving bipartisan consensus on federal privacy legislation).

152. See, e.g., Letter from Neil L. Bradley, Exec. Vice President, U.S. Chamber of Com., to Maria Cantwell, Chair, Comm. on Com., Sci., and Transp., et al. (May 31, 2022) (expressing concerns about the American Data Privacy and Protection Act and reiterating opposition to a private right of action); U.S. CHAMBER OF COM., PRIVACY PRINCIPLES 1–2 (2018) (opposing a private right of action in federal privacy legislation and advocating for federal preemption of state laws).

Congress has yet to deliver.¹⁵³ The same is reasonably expected for AI regulation in the commercial market.¹⁵⁴

Major shocks to the system might swing Congress into action.¹⁵⁵ But, at present, Congress seems willing and able to regulate AI only at the margins, where harm is clear and where guardrails would not hamstring AI developers. For example, in 2025, Congress enacted the Take It Down Act.¹⁵⁶ The Act criminalizes the creation or distribution of nonconsensual, sexually explicit AI-generated deepfakes.¹⁵⁷ It also requires online platforms to establish procedures for swift content removal upon request.¹⁵⁸

On the whole, however, Congress has shown little appetite for regulating AI in the private market.¹⁵⁹ Political dysfunction is one reason,¹⁶⁰ but not the most important reason. AI's political economy is a dragooning force that condenses policy, progress, power, and profits. Attempts to tease them apart are met with alarmism and fierce resistance.¹⁶¹ Further, the constitutional structure itself may

153. See Cameron F. Kerry, *Protecting Privacy in an AI-Driven World*, BROOKINGS INST. (Feb. 10, 2020), <https://www.brookings.edu/articles/protecting-privacy-in-an-ai-driven-world/> [<https://perma.cc/YB29-C3DE>] (discussing the challenges of enacting a national data privacy legislation).

154. See *id.*; Rebecca Klar, *AI Threats Loom Over Cautious Congress*, THE HILL (Jan. 10, 2024, at 6:00 ET), <https://thehill.com/policy/technology/4398363-ai-threats-loom-over-cautious-congress/> [<https://perma.cc/2FF8-29PR>] (discussing obstacles to congressional action on AI, including partisanship, lobbying, and the rapid pace of AI development outpacing legislative processes); WHITE & CASE, *AI Watch*, *supra* note 144 (discussing AI bills and policy issues on Congress's agenda).

155. See BRYAN D. JONES & FRANK R. BAUMGARTNER, *THE POLITICS OF ATTENTION* 20–22 (2005) (arguing that policy change often requires a focusing event to overcome political inertia and status quo bias); R. Kent Weaver, *The Politics of Blame Avoidance*, 6 J. PUB. POL'Y 371, 375–76 (1986) (explaining how politicians often avoid taking action on issues with diffuse costs and benefits, preferring to act only in response to clear, immediate crises).

156. Take It Down Act, Pub. L. No. 119-12, § 1, 139 Stat. 55 (2025).

157. *Id.* § 2(a)(3)(A).

158. *Id.* § 3(a)(1)–(3).

159. See, e.g., HOUSE AI REPORT, *supra* note 96.

160. See Michael J. Teter, *Congressional Gridlock's Threat to Separation of Powers*, 2013 WIS. L. REV. 1097, 1098–99; see also ATA USLU ET AL., *CHIP 50, AI ACROSS AMERICA: ATTITUDES ON AI USAGE, JOB IMPACT, AND FEDERAL REGULATION* 4 (2025) (reporting that “Americans have not formed settled views on AI governance” based on a 50-state survey).

161. See *supra* note 72 and accompanying text; TECHNET, *2024 FEDERAL POLICY PRINCIPLES* 1–3 (2024), <https://www.technet.org/wp-content/uploads/2024/02/2024-TechNet-Federal-Policy-Principles.pdf> [<https://perma.cc/8K8Z-4M6P>] (pledging to “oppose any legislation that . . . effectively prohibits” key AI technologies and urging regulators to avoid “overly restrictive” or “one-size-fits-all” rules); SPECIAL COMPETITIVE STUD. PROJECT, *VISION FOR COMPETITIVENESS: MID-DECADE OPPORTUNITIES FOR STRATEGIC VICTORY* 6 (2024), <https://www.scpai.org/wp-content/uploads/2023/04/Vision-for-Competitiveness-1-1.pdf> [<https://perma.cc/VDC4-3MCF>] (observing that the “downstream opportunities that have emerged from generative AI, the influx of capital to AI-related endeavors, and the demand for AI-powering chips” combine to concentrate technological progress, economic power, and policy leverage in a single competitive arena); see also Kate Brennan, Amba Kak

delay or deflate Congress's willingness to act.¹⁶² The availability of alternative policy outlets in the executive branch may reduce pressure on Congress to act.

2. Executive

President Trump and President Biden issued a handful of executive orders to establish high-level guidance and priorities regarding AI.¹⁶³ However, these directives do not confer enforceable rights or obligations on private actors. Nor can they without congressional authorization.¹⁶⁴ As of this writing, the most wide-ranging presidential initiative was Biden's Executive Order 14,110.¹⁶⁵ It established high-level principles for the executive branch, including ensuring safety and security, advancing equity and civil rights, promoting competition and innovation, and protecting workers and civil liberties.¹⁶⁶ However, upon retaking office in his second term, President Trump acted swiftly to reset the federal AI agenda. In week one, he rescinded Biden's Executive Order 14,110¹⁶⁷ and issued Executive Order 14,179, "Removing Barriers to American Leadership in Artificial Intelligence."¹⁶⁸ The order declares that U.S. policy is to "sustain and enhance America's global AI dominance" through economic competitiveness and national security, while ensuring AI development remains "free from ideological bias or engineered social agendas."¹⁶⁹ An accompanying White House "fact sheet" argued that Biden's

& Sarah Myers West, *Artificial Power: 2025 Landscape Report*, AINOW INST. 5–7 (June 3, 2025), https://ainowinstitute.org/wp-content/uploads/2025/06/FINAL-20250602_AINowLandscapeReport_Full.pdf [<https://perma.cc/B44E-9GR5>] (arguing that dominant firms deploy AI "as a strategic marketing term and as a set of automation technologies" to cement corporate power and profit).

162. See Gillian E. Metzger, *Agencies, Polarization, and the States*, 115 COLUM. L. REV. 1739, 1748, 1758 (2015) (explaining that congressional gridlock often compels the executive branch to act); Michael S. Greve & Ashley C. Parrish, *Administrative Law Without Congress*, 22 GEO. MASON L. REV. 501, 511–39 (2015) (analyzing effect of congressional inaction on executive action). Beyond the executive branch, states provide additional political outlets. See *infra* Sections II.C, II.D.

163. President Biden issued Strengthening and Promoting Innovation in the Nation's Cybersecurity, Exec. Order No. 14,144, 90 Fed. Reg. 6755 (Jan. 16, 2025) (aiming to bolster federal cybersecurity measures and promote the use of advanced technologies, including AI); Exec. Order No. 14,110, *supra* note 16 (establishing federal standards and guidelines for AI safety, equity, and accountability). President Trump issued two AI-focused executive orders during his first term in office: Promoting the Use of Trustworthy Artificial Intelligence in the Federal Government, Exec. Order No. 13,960, 85 Fed. Reg. 78,939 (Dec. 3, 2020) (focusing on principles for federal agencies to use AI ethically and responsibly); and Maintaining American Leadership in Artificial Intelligence, Exec. Order No. 13,859, 84 Fed. Reg. 3967 (Feb. 11, 2019) (emphasizing AI research, development, and workforce initiatives to ensure U.S. global leadership in AI). More are expected during his administration.

164. See *Youngstown Sheet & Tube Co. v. Sawyer*, 343 U.S. 579, 637–38 (1952) (Jackson, J., concurring).

165. See Exec. Order No. 14,110, *supra* note 16.

166. *Id.* § 2; see LAURIE HARRIS & CHRIS JAIKARAN, CONG. RSCH. SERV., R47843, HIGHLIGHTS OF THE 2023 EXECUTIVE ORDER ON ARTIFICIAL INTELLIGENCE FOR CONGRESS (2023) (providing a summary of requirements for agency action and timeline of deliverables).

167. Exec. Order No. 14,179, *supra* note 7.

168. *Id.*

169. *Id.* §§ 1, 2.

Executive Order 14,110 was “unnecessarily burdensome . . . for companies developing and deploying AI,” and would “stifle private sector innovation and threaten American technological leadership.”¹⁷⁰

In fact, however, the great bulk of agency action during the Biden Administration was directed at *government* AI practices, not *industry* practices.¹⁷¹ Moreover, with few exceptions, the Biden policies applicable to private actors were *not legally binding*.¹⁷² Take, for instance, the “AI Risk Management Framework” produced by the National Institute of Standards and Technology (“NIST”).¹⁷³ The NIST framework offers principles and practical guidance for managing AI risk.¹⁷⁴

170. To date, only a handful of narrowly scoped AI regulations have been enacted. For example, the Centers for Medicare & Medicaid Services have implemented rules to ensure that AI use in Medicaid (and Medicare) plans adheres to specific guidelines to protect patient care. Medicare Program; Contract Year 2024 Policy and Technical Changes to the Medicare Advantage Program, Medicare Prescription Drug Benefit Program, Medicare Cost Plan Program, and Programs of All-Inclusive Care for the Elderly, 88 Fed. Reg. 22290, 22440–41 (Apr. 14, 2023) (to be codified at 42 C.F.R. pts. 417, 422, 423, 455, 460). The FTC has enacted a final rule prohibiting the impersonation of government agencies, businesses, and their officials, including through AI-generated deepfakes. Trade Regulation Rule on Impersonation of Government and Businesses, 89 Fed. Reg. 15017, 15017 (Mar. 1, 2024) (to be codified at 16 C.F.R. pt. 461). The FDA has established a regulatory framework for classifying machine-learning software as a medical device into three risk classes. *See* Medical Devices; Medical Device Classification Regulations to Conform to Medical Software Provisions in the 21st Century Cures Act, 86 Fed. Reg. 20278 (Apr. 19, 2021) (to be codified at 21 C.F.R. pts. 862, 866, 880, 884, 892).

171. *See* Exec. Order No. 14,110, *supra* note 16, § 2 (“When undertaking the actions set forth in this order, executive departments and agencies (agencies) shall, as appropriate and consistent with applicable law, adhere to these principles . . .”). The closest the order comes to imposing industry requirements was § 4.2(a)(i), which directed the Secretary of Commerce to require developers of “dual-use foundation AI models” to provide information on their development activities. *Id.* § 4.2(a)(i). Even then, it would have only applied to a handful of the largest AI firms and only required the disclosure of information that firms had already voluntarily agreed to. *See* Establishment of Reporting Requirements for the Development of Advanced Artificial Intelligence Models and Computing Clusters, 89 Fed. Reg. 73612, 73616 (Sep. 11, 2024) (to be codified at 15 C.F.R. pt. 702). Nothing in the order, or implementing regulations, required firms to conduct any safety testing, obtain government permissions, or any such thing. In the waning days of the Biden Administration, the Commerce Department issued an interim rule that introduced new export controls on computing hardware and AI model weights for certain advanced dual-use AI models. *See* Public Briefing on Framework for Artificial Intelligence Diffusion, 90 Fed. Reg. 3624, 3625 (Jan. 15, 2025) (to be codified at 15 C.F.R. pts. 732, 734, 740, 742, 744, 748, 750, 762, 772, 774). The fate of these rules remains unclear under the Trump Administration.

172. *See* Marchant & Gutierrez, *supra* note 105, at 384–86 (discussing and distinguishing “soft law” from binding “hard law” in the AI context); *see also* Nat’l Mining Ass’n v. McCarthy, 758 F.3d 243, 250–51 (D.C. Cir. 2014) (distinguishing between legislative rules, which have the force of law, and nonbinding policy statements, which are exempted from rulemaking procedures).

173. *See* NIST AI RMF, *supra* note 26, at 7; NAT’L INST. OF STANDARDS & TECH., ARTIFICIAL INTELLIGENCE RISK MANAGEMENT FRAMEWORK: GENERATIVE ARTIFICIAL INTELLIGENCE PROFILE (2024), <https://nvlpubs.nist.gov/nistpubs/ai/NIST.AI.600-1.pdf> [<https://perma.cc/A7K3-TB33>].

174. NIST AI RMF, *supra* note 26, at 2.

But it is expressly voluntary.¹⁷⁵ Similarly, many agencies have issued nonbinding guidelines and best practices for sector-specific AI applications.¹⁷⁶ A handful of agencies also issued warnings about sanctionable uses of AI under existing laws. During the Biden Administration, for example, the Federal Trade Commission, the Equal Employment Opportunity Commission, the Consumer Financial Protection Bureau, and the Department of Justice issued a joint statement clarifying that their existing authority extends to “software and algorithmic processes, including AI.”¹⁷⁷

The industry is often well-advised to heed such guidance, insofar as it reflects an administration’s interpretations of law and enforcement policies. However, as a purely legal matter, such pronouncements are advisory and nonbinding.¹⁷⁸ And like executive orders, agency guidance documents can be rescinded with little or no bureaucratic process.¹⁷⁹ Thus, for instance, most of Biden’s nonbinding policies have been rescinded or archived by the Trump Administration.¹⁸⁰ This flexibility may be a virtue. However, it also highlights the

175. *Id.*

176. *See, e.g.*, OFF. OF SCI. & TECH. POL’Y, BLUEPRINT FOR AN AI BILL OF RIGHTS: MAKING AUTOMATED SYSTEMS WORK FOR THE AMERICAN PEOPLE (2022) (“The Blueprint for an AI Bill of Rights is non-binding and does not constitute U.S. government policy.”); MIGUEL A. CARDONA, ROBERTO J. RODRIGUEZ & KRISTINA ISHMAEL, OFF. OF EDUC. TECH., ARTIFICIAL INTELLIGENCE AND THE FUTURE OF TEACHING AND LEARNING: INSIGHTS AND RECOMMENDATIONS (2023), <https://www.ed.gov/sites/ed/files/documents/ai-report/ai-report.pdf> [<https://perma.cc/ZF6E-67ES>] (“Other than statutory and regulatory requirements included in the document, the contents of this guidance do not have the force and effect of law and are not meant to bind the public.”); *FTC Launches Inquiry into AI Chatbots Acting as Companions*, FED. TRADE COMM’N (Sep. 11, 2025), <https://www.ftc.gov/news-events/news/press-releases/2025/09/ftc-launches-inquiry-ai-chatbots-acting-companions> [<https://perma.cc/HK77-KYYL>]; U.S. EQUAL EMP. OPPORTUNITY COMM’N, EEOC-NVTA-2022-2, THE AMERICANS WITH DISABILITIES ACT AND THE USE OF SOFTWARE, ALGORITHMS, AND ARTIFICIAL INTELLIGENCE TO ASSESS JOB APPLICANTS & EMPLOYEES (May 12, 2022).

177. *See* Rohit Chopra et al., *Joint Statement on Enforcement Efforts Against Discrimination and Bias in Automated Systems*, FED. TRADE COMM’N (2023), https://www.ftc.gov/system/files/ftc_gov/pdf/EEOC-CRT-FTC-CFPB-AI-Joint-Statement%28final%29.pdf [<https://perma.cc/7SCM-ZJQU>].

178. *See* Nicholas Parrillo, *Federal Agency Guidance and the Power to Bind: An Empirical Study of Agencies and Industries*, 36 YALE J. ON REGUL. 165, 168–70 (2019).

179. *See* TODD GARVEY, CONG. RSCH. SERV., R41546, A BRIEF OVERVIEW OF RULEMAKING AND JUDICIAL REVIEW 9 (2017) (explaining that an agency may issue, amend, or repeal a guidance document with relative ease and speed because they are not subject to APA’s notice-and-comment requirements); *see also* Revocation of Certain Executive Orders Concerning Federal Regulation, Exec. Order No. 13,992, 86 Fed. Reg. 7049, 7049 (Jan. 20, 2021) (revoking a prior executive order on guidance documents and directing agencies to “promptly take steps to rescind any . . . regulations . . . implementing or enforcing” it).

180. *See Fact Sheet: President Donald J. Trump Takes Action to Enhance America’s AI Leadership*, THE WHITE HOUSE (Jan. 23, 2025), <https://www.whitehouse.gov/fact-sheets/2025/01/fact-sheet-president-donald-j-trump-takes-action-to-enhance-americas-ai-leadership/> [<https://perma.cc/77T7-GVGJ>] (“Today’s executive order . . . [c]alls for departments and agencies to revise or rescind all policies, directives, regulations, orders, and other actions taken under the Biden AI order that are inconsistent with enhancing America’s leadership in AI.”); Alicia A. Baiardo et al., *Trump Administration Executive Orders Seek to Deregulate Artificial Intelligence*, MCGUIREWOODS

instability of nonbinding executive directives, particularly when they lack a clear statutory foundation.

To operationalize Trump's Executive Order 14,179, the White House published "Winning the Race: America's AI Action Plan" in July 2025.¹⁸¹ The plan's core tenets are articulated across its three pillars: accelerating AI innovation, building AI infrastructure, and leading international AI diplomacy and security.¹⁸² On the regulatory front, the plan seeks to establish federal AI primacy, not through the creation of a national regulatory framework, but through aggressive deregulation, industrial policy, and financial incentives.¹⁸³ This deregulatory push is coupled with a significant ideological shift. Among other things, the AI Action Plan instructed NIST to purge references to diversity, equity, and inclusion ("DEI") and "climate change" from its AI Risk Management Framework.¹⁸⁴ Moreover, an accompanying executive order bars "woke AI" in federal procurement by requiring only "[i]deological[ly] [n]eutral[]" large language models for government use.¹⁸⁵

Some continuity between the Biden and Trump Administrations remains, particularly on national security. As of this writing, Biden's AI National Security Memorandum ("NSM-25") remains intact, although its future remains uncertain.¹⁸⁶ Some Biden-era export controls on AI-related technologies remain, albeit under more simplified and permissive terms.¹⁸⁷ Broadly speaking, however, the executive

(Feb. 11, 2025), <https://www.mcguirewoods.com/client-resources/alerts/2025/2/trump-administration-executive-orders-seek-to-deregulate-artificial-intelligence/> [<https://perma.cc/VR57-DFYB>] (reporting that, pursuant to Executive Order 14,179, "[m]ultiple government departments now have updated or removed AI guidance from their websites").

181. THE WHITE HOUSE, WINNING THE RACE: AMERICA'S AI ACTION PLAN 1 (2025) [hereinafter AI ACTION PLAN], <https://www.whitehouse.gov/wp-content/uploads/2025/07/Americas-AI-Action-Plan.pdf> [<https://perma.cc/D5HK-VA8R>].

182. *Id.*; see Accelerating Federal Permitting of Data Center Infrastructure, Exec. Order No. 14,318, 90 Fed. Reg. 35,385 (July 23, 2025).

183. AI ACTION PLAN, *supra* note 181, at 1.

184. *Id.* at 4.

185. Preventing Woke AI in the Federal Government, Exec. Order No. 14,319, 90 Fed. Reg. 35,389 (2025).

186. National Security Memorandum-25, Memorandum on Advancing the United States' Leadership in Artificial Intelligence; Harnessing Artificial Intelligence to Fulfill National Security Objectives; and Fostering the Safety, Security, and Trustworthiness of Artificial Intelligence, 89 Fed. Reg. 87,365 (Oct. 24, 2024).

187. See Press Release, Department of Commerce Announces Rescission of Biden-Era Artificial Intelligence Diffusion Rule, Strengthens Chip-Related Export Controls, U.S. Dep't of Com., Bureau of Indus. & Sec. (May 13, 2025), <https://www.bis.gov/press-release/department-commerce-rescinds-biden-era-artificial-intelligence-diffusion-rule-strengthens-chip-related> [<https://perma.cc/KX35-GPM9>] (announcing formal rescission of the 2025 Diffusion Rule and directing BIS not to enforce it); Nazak Nikakhtar et al., *BIS Rescinds AI Diffusion Rule and Issues Guidance on Advanced Computing Integrated Circuits*, WILEY (May 22, 2025), <https://www.wiley.law/alert-BIS-Rescinds-AI-Diffusion-Rule> [<https://perma.cc/3RCB-4ZA4>] (describing the Trump Administration's replacement framework, which relies on narrower guidance documents and new license exceptions rather than the broad, tiered controls of the rescinded rule).

branch must contend with the same regulatory skeptics and techno-optimists who portray AI regulation as ill-conceived or unwarranted.¹⁸⁸

3. Judiciary

The federal regulatory headwinds are more than political—they are also judicial and doctrinal. The Supreme Court has grown increasingly skeptical of broad assertions of federal agency power.¹⁸⁹ The focus here is on two doctrinal developments that will affect agency efforts to regulate AI: namely, the demise of *Chevron* deference¹⁹⁰ and the rise of the major questions doctrine.¹⁹¹ Both link to a vision of separation of powers that positions courts as counterweights to executive overreach.¹⁹² Although far less appreciated, these administrative law doctrines have federalism inflections.¹⁹³ First, they create substantial barriers to federal regulatory action, leaving policy gaps that states can fill.¹⁹⁴ Second, an invalid federal law cannot preempt state law. Thus, to the extent courts strike down federal regulations, state law will have less to contend with.¹⁹⁵

188. See *supra* note 72 and accompanying text.

189. See, e.g., Metzger, *supra* note 135, at 26 (critically examining this trend); *Biden v. Nebraska*, 600 U.S. 477, 501 (2023) (citing “concerns over the exercise of administrative power”); *EPA v. EME Homer City Generation, L.P.*, 572 U.S. 489, 525 (2014) (Scalia, J., dissenting) (decrying that “[t]oo many important decisions of the Federal Government are made nowadays by unelected agency officials exercising broad lawmaking authority, rather than by the people’s representatives in Congress”).

190. See *Loper Bright Enters. v. Raimondo*, 603 U.S. 369, 412–13 (2024).

191. See *West Virginia v. EPA*, 597 U.S. 697 (2022); Daniel T. Deacon & Leah M. Litman, *The New Major Questions Doctrine*, 109 VA. L. REV. 1009, 1014 (2023) (tracing the MQD’s evolution into something “new”); Louis J. Capozzi III, *The Past and Future of the Major Questions Doctrine*, 84 OHIO ST. L.J. 191, 227 (2023); see also *infra* Subsection III.A.2 (discussing what the MQD portends for AI federalism).

192. See *Loper Bright*, 603 U.S. at 391–92 (holding that the APA requires courts—not agencies—to “decide all relevant questions of law,” restoring the constitutional balance “reflected by judicial practice dating back to *Marbury*”); *West Virginia*, 597 U.S. at 716, 721–24 (invoking “separation-of-powers principles” to require a “clear congressional authorization” before an agency may exercise power of “vast economic and political significance”); *id.* at 737 (Gorsuch, J., concurring) (explaining that the MQD “works . . . to protect the Constitution’s separation of powers” by ensuring that “important subjects” remain under congressional, not executive, control).

193. See Richard W. Murphy, *Democracy, Chevron Deference, and the Major Questions Anti-Deference*, 58 GA. L. REV. 987, 1002–04, 1002 n.69 (2024) (explaining that the Court frames the MQD as a “clear-statement rule” that protects “self-government . . . federalism, and the separation of powers” by positioning the judiciary to police expansive agency claims).

194. This federalism effect was recognized, but not formalized, in Justice Gorsuch’s concurring opinion. *West Virginia*, 597 U.S. at 740 (Gorsuch, J., concurring). Specifically, in lending his support for an invigorated MQD, Justice Gorsuch voiced concern about agencies overstepping legislative bounds and moving into areas where “state authority has traditionally predominated.” *Id.* (citing *Solid Waste Agency of N. Cook Cnty. v. Army Corps of Eng’rs*, 531 U.S. 159, 173–74 (2001)). The clear implication is that states may regulate in areas where the federal government has not.

195. See *infra* Subsection III.A.2 (discussing the relational effects of administrative law and preemption).

a. From Deference to De Novo

In *Loper Bright v. Raimondo*, the Supreme Court overruled the seminal *Chevron* doctrine.¹⁹⁶ For 40 years, that doctrine generally required courts to defer to an agency's "reasonable" interpretation of ambiguous statutes.¹⁹⁷ Now, with *Chevron* overruled, courts generally must review an agency's statutory interpretation de novo to discern the statute's single "best" meaning.¹⁹⁸

Loper Bright did not entirely foreclose judicial deference. By its own terms, the Court's holding was limited to judicial review of agency action under the Administrative Procedure Act.¹⁹⁹ Moreover, Congress may express its intent to delegate discretionary authority for agencies to fill statutory gaps and details. In those instances, the courts' role is to respect Congress's choice and ensure that agencies act within the scope of the statutory delegation.²⁰⁰ Furthermore, the Court retained its pre-*Chevron* interpretive methods, including the *Skidmore* deference doctrine.²⁰¹ Under *Skidmore*, an agency's views may reflect a "body of experience and informed judgment to which courts and litigants may properly resort for guidance."²⁰² Generally, however, the Court's pivot from *mandatory* deference to *maybe* deference will only make it harder for agencies to regulate AI under preexisting statutes.²⁰³

b. The Major Questions Doctrine ("MQD")

Whereas *Loper Bright* requires de novo judicial review, the MQD requires heightened judicial scrutiny when agencies assert regulatory authority over "major questions" of public policy.²⁰⁴ In *West Virginia v. EPA*, the Court described the doctrine as "an identifiable body of law" to address the problem of "agencies asserting highly consequential power beyond what Congress could reasonably be understood to have granted."²⁰⁵ The doctrine is still developing; thus, its contours

196. *Loper Bright*, 609 U.S. at 412 ("*Chevron* is overruled.").

197. *Chevron, U.S.A., Inc. v. Nat. Res. Def. Council, Inc.*, 467 U.S. 837, 842–44, 843 n.9 (1984); *see also Loper Bright*, 603 U.S. at 404–06 (describing the conditions under which *Chevron* did and did not apply).

198. *Loper Bright*, 609 U.S. at 400.

199. *Id.* at 412.

200. *Id.* at 404. That might be the case, for example, when Congress delegates to an agency the authority to regulate as "appropriate" or "reasonable" in respect to a particular provision or category of decisions. *See id.* at 394–95; *see also Seven Cnty. Infrastructure Coal. v. Eagle County*, 605 U.S. 168, 182–184 (2025) (holding that NEPA's fact-intensive and policy-laden requirements warrant deference to the Surface Transportation Board's expertise).

201. *See Loper Bright*, 603 U.S. at 388; *Skidmore v. Swift & Co.*, 323 U.S. 134, 139–40 (1944).

202. *Loper Bright*, 603 U.S. at 388 (quoting *Skidmore*, 323 U.S. at 140)).

203. As relevant here, the APA requires reviewing courts to "decide all relevant questions of law, interpret . . . statutory provisions, and . . . set aside agency action . . . found to be . . . in excess of statutory jurisdiction, authority, or limitations[.]" 5 U.S.C. § 706.

204. *See West Virginia v. EPA*, 597 U.S. 697, 716 (2022) ("[W]e expect Congress to speak clearly when authorizing an agency to exercise powers of vast economic and political significance.").

205. *Id.* at 724.

and application remain unsettled.²⁰⁶ But its general methodology is best understood in two steps.

The first step requires courts to determine whether the challenged agency action qualifies as “major.”²⁰⁷ Relevant factors include the “history and the breadth of the authority that the agency has asserted and the economic and political significance of that assertion.”²⁰⁸ Second, if the agency action is major, courts apply heightened judicial scrutiny.²⁰⁹ Under this standard, the agency bears the burden of demonstrating “clear congressional authorization” for its actions.²¹⁰

Whether any specific AI regulation can survive MQD scrutiny depends on the circumstances. However, taking the doctrine on its own terms, the deck is already stacked against agencies that seek to regulate AI under existing statutory authority. To start, AI legislative proposals blanket the political landscape.²¹¹ Thus, it is extremely easy to point to some pending statutory bill as evidence that the matter is politically significant. Arguments of this sort routinely find traction in MQD cases.²¹²

Moreover, as noted above, an agency’s claim to regulatory authority will be tested against historical baselines.²¹³ This inquiry is inherently fraught in the AI context. An agency may claim that they could have regulated AI sooner and *chose* not to. However, a skeptical court might find that the agency’s claimed authority never existed and still does not. While the rapid advance of generative AI models sparked new policy concerns, the occasion to regulate machine-learning AI existed sooner.²¹⁴ Courts may also view an agency’s foray into AI regulation as a stark

206. See Louis J. Capozzi III, *Biden v. Nebraska and the Continued Refinement of the Major Questions Doctrine*, 13 HARV. J.L. & PUB. POL’Y: PER CURIUM, Summer 2024, at 6–7 (observing that in both *Nebraska* and *West Virginia*, the Court’s political-significance analysis focused on the *current* Congress).

207. *West Virginia*, 597 U.S. at 723.

208. *Id.* at 721.

209. *Id.* at 723.

210. *Id.*

211. See MULTISTATE.AI Tracker, *supra* note 8 (tracking AI bills).

212. See, e.g., *Biden v. Nebraska*, 600 U.S. 477, 501 (2023) (citing “80 student loan forgiveness bills” as evidence that Congress “is not unaware of the challenges facing student borrowers”); *id.* at 504 (emphasizing the “earnest and profound debate across the country” over student-loan cancellation); *West Virginia*, 597 U.S. at 721.

213. See, e.g., *Nebraska*, 600 U.S. at 501 (stating that the Secretary of Education had not “previously claimed powers of [such] magnitude under the HEROES Act”); *West Virginia*, 597 U.S. at 728 (describing the “unprecedented” nature of the agency’s regulation); *id.* at 747 (Gorsuch, J., concurring) (comparing the “agency’s past interpretations of the relevant statute” with the agency action under review).

214. See, e.g., EXEC. OFF. OF THE PRESIDENT, NAT’L SCI. & TECH. COUNCIL COMM. ON TECH., PREPARING FOR THE FUTURE OF ARTIFICIAL INTELLIGENCE 1–3 (2016) (discussing the potential impacts of AI and the need for policy consideration); FED. TRADE COMM’N, BIG DATA: A TOOL FOR INCLUSION OR EXCLUSION? UNDERSTANDING THE ISSUES 1–2 (2016) (analyzing the implications of big data analytics for consumer protection).

departure from the federal government’s decades-long “light touch” approach to regulating digital technology.²¹⁵

Additionally, the economic impacts of AI regulations may trigger MQD scrutiny.²¹⁶ In sectoral silos, the economic impact of an AI regulation may be sufficiently “major” or not. But AI technologies are not beholden to sectors or siloes—much less those conceived in prior eras. Quite the contrary, AI bridges markets and creates new ones.²¹⁷ It operates in digital and physical space and is increasingly integrated into other products and services. Consequently, an agency’s regulation of AI in *one* sector could have significant upstream and downstream economic effects on *many* sectors.²¹⁸

Any one of the reasons above—political salience, historical baselines, and economic impact—might trigger MQD scrutiny. The combination only increases the likelihood. If so, the agency must “point to clear congressional authorization for the power it claims.”²¹⁹ It often won’t be there. While Congress generally anticipates technological and social change, the MQD requires, more specifically, that Congress had clearly authorized the agency action at issue.

* * *

In prior eras, Congress could legislate because it could broadly delegate.²²⁰ The overruling of *Chevron*, coupled with the MQD, means that Congress may need to legislate AI more explicitly and specifically.²²¹ It’s not impossible, but given the

215. See Adam Thierer, *The Policy Origins of the Digital Revolution & the Continuing Case for the Freedom to Innovate*, R ST. INST. (Aug. 15, 2024), <https://www.rstreet.org/commentary/the-policy-origins-of-the-digital-revolution-the-continuing-case-for-the-freedom-to-innovate/> [<https://perma.cc/GB3R-2NR2>] (discussing how policy choices, particularly those in the 1990s, enabled the digital revolution); John Blevins, *The Use and Abuse of “Light-Touch” Internet Regulation*, 99 B.U. L. REV. 177, 179–80 (2019); ADAM THIERER, PERMISSIONLESS INNOVATION: THE CONTINUING CASE FOR COMPREHENSIVE TECHNOLOGICAL FREEDOM 1–8 (2014).

216. See *West Virginia*, 597 U.S. at 714–15 (focusing on the economic impacts of the EPA’s regulatory scheme).

217. See Lareina Yee et al., *Technology Trends Outlook 2025*, MCKINSEY & CO. 2 (2025), <https://www.mckinsey.com/~media/mckinsey/business%20functions/mckinsey%20digital/our%20insights/the%20top%20trends%20in%20tech%202025/mckinsey-technology-trends-outlook-2025.pdf?shouldIndex=false> [<https://perma.cc/JMN5-WDDD>] (“AI both accelerates progress within individual domains and unlocks new possibilities at the intersections.”).

218. Cf. Natasha Brunstein & Richard L. Revesz, *Mangling the Major Questions Doctrine*, 74 ADMIN. L. REV. 217, 235–40 (2022) (investigating the inherent difficulties with estimating costs and benefits associated with new energy-efficient technology).

219. *West Virginia*, 597 U.S. at 723 (citation modified).

220. See, e.g., Jerry L. Mashaw, *Prodelegation: Why Administrators Should Make Policy Decisions*, 1 J.L. ECO. & ORG. 81, 81–82 (1985).

221. In *Biden v. Nebraska*, for example, the Court majority held that the education secretary’s statutory power to “waive or modify any statutory or regulatory provision applicable to the student financial assistance programs” did not license the creation of a loan forgiveness program with sufficient clarity for so major an initiative. 600 U.S. 477, 494–95 (2023) (citing 20 U.S.C. § 1098bb(a)(1)). Writing in dissent, Justice Kagan thought this

pace of AI innovation, such statutes might be suboptimal from the start and quickly go stale. If so, then the Court's new demands create conditions that, when met, make regulatory outcomes fall short. This portrait will be a cause for concern for those who favor AI regulation. Yet it may be less concerning when viewed through a federalism lens. As discussed below, states are willing and able to regulate AI where the federal government has not.

B. State AI Policy

States are not secondary players in AI governance; they are primary movers shaping how AI will be developed, deployed, and regulated. In 2024, state legislators considered 700 AI-related bills²²² and enacted more than 100.²²³ The trend continues in 2025.²²⁴ Like in Congress, most of these bills and legislative enactments apply to government uses of AI, funding initiatives for research and development, the creation of task forces, and job reskilling.²²⁵ However, unlike Congress, state legislatures have enacted substantive AI regulations across various domains, including education, employment, housing, healthcare, insurance, and intellectual property.²²⁶ Although no single model exists for these state-level initiatives, a few significant trends have emerged.²²⁷

To start, several state-level AI provisions were appended to comprehensive data-privacy legislation. For instance, the Colorado Privacy Act enables its residents to “opt out” of algorithmic “profiling” for consequential decision-making in housing, education, health care, and more.²²⁸ Another example is Minnesota’s Consumer Data Privacy Act, which grants individuals the right to challenge the results of algorithmic profiling.²²⁹

language was broad but not vague. *Id.* at 523 (Kagan, J., dissenting). Justice Kagan voiced the same concern in *West Virginia*. 597 U.S. at 764 (Kagan, J., dissenting) (“[W]hen Congress uses expansive language to authorize agency action, courts generally may not impose limits on the agency’s discretion.” (citation modified)).

222. Bill Kramer, *The New Wave of Comprehensive Consumer Protection AI Bills*, MULTISTATE.AI (Jan. 17, 2025), <https://www.multistate.ai/updates/vol-45> [<https://perma.cc/7U94-U8X6>].

223. See Kim Miller, *Which AI Bills Were Signed into Law in 2025?*, MULTISTATE.AI (Aug. 8, 2025), <https://www.multistate.ai/updates/vol-71> [<https://perma.cc/4JKM-MTR9>]; see also BRENNEN & SANDERSON, *supra* note 8, at 3.

224. See, e.g., Justine Gluck et al., *The State of State AI: Legislative Approaches to AI in 2025*, FUTURE OF PRIVACY F. (Oct. 2025), <https://fpf.org/wp-content/uploads/2025/10/The-State-of-State-AI-2025.pdf> (discussing trends in state AI regulation); *Artificial Intelligence 2025 Legislation*, NAT’L CONF. STATE LEGISLATORS (July 10, 2025), <https://www.ncsl.org/technology-and-communication/artificial-intelligence-2025-legislation> [<https://perma.cc/H4HJ-5FXP>] (tracking bills on artificial intelligence).

225. Max Rieper, *States Pursue AI for Economic and Workforce Development*, MULTISTATE.AI (Feb. 2, 2024), <https://www.multistate.ai/updates/vol-12> [<https://perma.cc/32A2-7676>].

226. See generally MULTISTATE.AI Tracker, *supra* note 8 (tracking state AI initiatives).

227. See Gluck et al., *supra* note 224 (discussing trends and offering a taxonomy of state AI regulation).

228. COLO. REV. STAT. §§ 6-1-1303(20), 6-1-1306(1)(a)(I)(C), 6-1-1313(2) (2023).

229. MINN. STAT. § 325M.07(1)(f)–(g) (2025).

In addition, new state laws mandate disclosure when consumers interact with AI systems, require explainability for automated decisions, and impose reporting obligations.²³⁰ For example, Utah requires companies deploying AI chatbots in regulated industries such as finance and healthcare to disclose their use to consumers.²³¹ New York requires businesses serving New York customers that employ personalized algorithmic pricing to say so explicitly and conspicuously.²³² Moreover, California has enacted a slew of AI transparency laws. Chief among them is a law requiring large AI developers to disclose information about the colossal datasets used to train their AI systems.²³³ When the law takes effect, it could facilitate the discovery of biases or inappropriate content in a model's underlying data.²³⁴

California also enacted the nation's first AI-safety law (SB 53).²³⁵ Developers of "frontier" models (defined by training compute exceeding 10²⁶ operations) will be required to report "critical safety incidents" to the state. In addition, "large frontier developers" (those exceeding \$500 million in annual revenue) must publish safety frameworks.²³⁶ Moreover, the Act establishes whistleblower protections, which prohibit frontier developers from retaliating against employees who disclose that a developer has violated the Act's requirements, or whose activities pose a "specific and substantial danger to public health or safety resulting from catastrophic risk."

230. See Bill Kramer, *Transparency in the Age of AI: The Role of Mandatory Disclosures*, MULTISTATE.AI (Jan. 19, 2024), <https://www.multistate.ai/updates/vol-10> [<https://perma.cc/YZ9F-3JHW>].

231. UTAH CODE ANN. § 13-75-103 (2025); UTAH CODE ANN. § 13-2-12 (repealed 2025).

232. N.Y. GEN. BUS. LAW § 349-a (McKinney 2025) (requiring disclosure that "THIS PRICE WAS SET BY AN ALGORITHM USING YOUR PERSONAL DATA").

233. See CAL. CIV. CODE § 3111 (2025).

234. See, e.g., Joy Buolamwini & Timnit Gebru, *Gender Shades: Intersectional Accuracy Disparities in Commercial Gender Classification*, 81 PROC. OF MACH. LEARNING RSCH. 1, 1–2 (2018), <https://proceedings.mlr.press/v81/buolamwini18a/buolamwini18a.pdf> [<https://perma.cc/BQB9-PH8K>].

235. Transparency in Frontier Artificial Intelligence Act, 2025 Cal. Stat. ch. 138 (codified at CAL. BUS. & PROF. CODE §§ 22757.10–16, CAL. GOV'T CODE § 11546.8, CAL. LAB. CODE §§ 1107–1107.2; *Governor Newsom Signs SB 53, Advancing California's World-Leading Artificial Intelligence Industry*, GOVERNOR GAVIN NEWSOM (Sep. 29, 2025), <https://www.gov.ca.gov/2025/09/29/governor-newsom-signs-sb-53-advancing-californias-world-leading-artificial-intelligence-industry> [<https://perma.cc/99LQ-YX6H>].

236. CAL. BUS. & PROF. CODE §§ 22757.11(d) (defining "critical safety incident" to include: unauthorized access to, modification of, or exfiltration of model weights resulting in death or bodily injury; harm from materialization of catastrophic risk; loss of control causing death or bodily injury; or use of deceptive techniques to subvert controls), 22757.11(i)–(j) (defining "frontier model" and "large frontier developer"), 22757.12 (requiring large frontier developers to implement a frontier AI framework and publish transparency reports before or concurrent with deploying new or substantially modified frontier models, including catastrophic risk assessments and mitigation measures), 22757.13 (requiring all frontier developers to report critical safety incidents to the California Office of Emergency Services).

Thus far, most state AI laws focus on specific sectors or contexts.²³⁷ For example, Illinois enacted landmark laws to protect individuals against AI harms in employment settings, such as discriminatory outcomes caused by AI-powered resume screening and other algorithmic decisions.²³⁸ Meanwhile, in other states, health insurers will be prohibited from using AI tools to make determinations of medical necessity.²³⁹ In addition to sector-specific regulations, however, some states target certain applications or uses. For example, more than 40 states have expressly prohibited or restricted the dissemination of AI-generated deepfakes.²⁴⁰ Another area of legislative focus is AI “companion” chatbots, including those marketed for therapeutic purposes. In 2025, for example, California enacted a law that requires chatbot operators to implement safety protocols for minors and at-risk users, including systems to provide resources for those expressing suicidal ideation.²⁴¹ Illinois took a different approach, narrower in scope yet more restrictive. It outright bans the use of chatbots to make independent therapeutic decisions or to interact directly with clients without a clinician’s oversight.²⁴²

237. See, e.g., ALA. CODE §§ 15-10-110 to -111 (regulating the use of facial recognition in criminal arrests); N.C. GEN. STAT. § 14-202.7(a)(3) (2024) (criminalizing deepfakes created for sexual extortion); Yi-Jen Ho, Wael Jabr & Yifan Zhang, *AI Enforcement: Examining the Impact of AI on Judicial Fairness and Public Safety* (Aug. 6, 2023), <https://ssrn.com/abstract=4533047> [<https://perma.cc/MZ5E-99BY>] (concerning Virginia’s use of AI in sentencing); Mintaka Angell, *Artificial Intelligence Helps States Democratize Data and Improve Lives*, STATETECH (Jan. 16, 2024), <https://statetechmagazine.com/article/2024/01/artificial-intelligence-helps-states-democratize-data-and-improve-lives> [<https://perma.cc/7AK5-ACAD>].

238. 775 ILL. COMP. STAT. 5/2-101(N)–(O), -102(L) (effective Jan. 1, 2026).

239. CAL. HEALTH & SAFETY CODE § 1367.01(k)(2) (prohibiting AI from making medical necessity determinations).

240. See, e.g., *Deepfake Policy in the United States, 2019 – Present*, BALLOTPEdia, https://ballotpedia.org/Deepfake_policy_in_the_United_States%2C_2019_-_Present [<https://perma.cc/M6V8-NRYP>] (last visited Oct. 15, 2025) (reporting that 46 states regulate nonconsensual sexual deepfakes and 26 states regulate political deepfakes); IND. CODE §§ 34-21.5-2-1(1), -3-1(a) (2024) (authorizing a civil action for the disclosure of nonconsensual deepfake pornography); WIS. STAT. § 948.125(1)(b) (2024) (prohibiting possession, production, or distribution of “digital or computer-generated” child-sexual-abuse imagery); *infra* Subsection II.C.1 (discussing state laws targeting political deepfakes).

241. S.B. 243, 2025 Cal. Legis. Serv. Ch. 677 (West 2025) (enacted); see *Governor Newsom Signs Bills to Further Strengthen California’s Leadership in Protecting Children Online*, GOVERNOR GAVIN NEWSOM (Oct. 13, 2025), <https://www.gov.ca.gov/2025/10/13/governor-newsom-signs-bills-to-further-strengthen-californias-leadership-in-protecting-children-online> [<https://perma.cc/NB23-6HLL>]. At the same time, however, Newsom vetoed a broader child safety bill related to chatbots. Assemb. B. 1064, 2025–2026 State Assemb., Reg. Sess. (Cal. 2025) (vetoed by Gov. Newsom Oct. 13, 2025); Gov. Gavin Newsom, Veto Message on Assembly Bill 1064 (Oct. 13, 2025), <https://www.gov.ca.gov/wp-content/uploads/2025/10/AB-1064-Veto.pdf> [<https://perma.cc/S85H-XKVA>] (stating that the bill’s broad restrictions would unintentionally ban AI chatbot use by minors entirely, when adolescents need to learn to interact with AI systems safely).

242. H.B. 1806, 2025 Gen. Assemb., Reg. Sess. (Ill. 2025) (enacted). Nevada enacted a similar law that restricts how healthcare professionals can use such systems. Assemb. B. 406, 2025 State Assemb., 83d Sess. (Nev. 2025).

Algorithmic price-fixing is also on the agenda. In 2025, nearly half of the states considered bills that would limit algorithmic rent pricing and AI-enabled collusion.²⁴³ Most failed to pass, one was vetoed,²⁴⁴ and two were signed into law. Specifically, New York amended its antitrust law to prohibit landlords from using “coordinating” algorithms that pool competitors’ data to set rental prices.²⁴⁵ California’s algorithmic price-fixing law is broader: it amends the state’s antitrust law to create two distinct prohibitions for “common pricing algorithms” that use competitor data.²⁴⁶ First, it prohibits using or distributing such algorithms as part of any conspiracy to restrain trade; second, it makes it illegal to coerce another person to adopt an algorithm’s recommended price.²⁴⁷

More ambitiously, a handful of states in 2024 and 2025 aimed for “comprehensive” AI frameworks that extend across sectors and applications.²⁴⁸ Colorado’s Artificial Intelligence Act was the first of this kind signed into law in 2024.²⁴⁹ The Act will impose several new requirements, including a “reasonable care” standard to protect consumers from potential bias of “high-risk” AI systems, mandatory “impact assessments” of covered systems, and transparency obligations when an AI system is a “substantial factor” in making a “consequential decision” that affects a consumer.²⁵⁰ The Act also requires developers to take corrective

243. See, e.g., *Artificial Intelligence 2025 Legislation*, *supra* note 224; see also A.B. 325 2025–2026 Leg., Reg. Sess. (Cal. 2025) (prohibiting the use or distribution of pricing algorithms trained with competitor data); H.B. 25-1004, 75th Gen. Assemb., 1st Reg. Sess. (Colo. 2025) (barring sale or use of “algorithmic device[s]” that facilitate coordinated rent prices among landlords).

244. Colorado’s legislature passed H.B. 25-1004 to bar landlords from employing algorithmic devices to set rent, but Governor Polis vetoed the bill. See H.B. 25-1004, 75th Gen. Assemb., 2025 Reg. Sess. (Colo. 2025) (vetoed May 30, 2025).

245. S.B. 7882, 2025–2026 N.Y. Legis. Sess. (N.Y. 2025) (codified as amended in N.Y. GEN. BUS. LAW § 340-b).

246. CAL. BUS. & PROF. CODE §§ 16729(a)–(b) (2026). A “common pricing algorithm” is defined as “any methodology, including a computer, software, or other technology, used by two or more persons, that uses competitor data to recommend, align, stabilize, set, or otherwise influence a price or commercial term.” *Id.* § 16729(d)(3).

247. *Id.* §§ 16729(a) (prohibiting the use or distribution of such algorithms as part of any conspiracy to restrain trade), 16729(b) (making it illegal to coerce another person to adopt an algorithm’s recommended price).

248. See Austin Jenkins, *Lawmakers Explore AI Benefits, Risks at National Summit*, PLURIBUS NEWS (Aug. 6, 2024, at 6:30 AM), <https://pluribusnews.com/news-and-events/lawmakers-explore-ai-benefits-risks-at-national-summit/> [https://perma.cc/7P43-HRVF] (reporting that “members of a bipartisan, multi-state AI working group” said “that they hope to see comprehensive legislation introduced in a dozen or more states in 2025”).

249. COLO. REV. STAT. §§ 6-1-1701 to -1707 (2024). Connecticut came close to enacting a similar bill sponsored by state Senator James Maroney. However, a veto threat by Governor Lamont effectively killed the bill. See Ken Dixon, *Proposed Bill on Artificial Intelligence Regulation in CT Dies After Gov. Ned Lamont Threatens Veto*, CT INSIDER (May 7, 2024), <https://www.ctinsider.com/politics/article/if-bill-ai-survives-ct-house-vote-lamont-19444053.php> [https://perma.cc/JQ3B-DRBS].

250. See COLO. REV. STAT. § 6-1-1701(1)(a) (defining algorithmic discrimination as “unlawful differential treatment or impact that disfavors an individual or group of individuals on the basis of their actual or perceived, age, color, disability, ethnicity . . . or

actions, such as disabling AI systems known to be discriminatory.²⁵¹ Other states have pursued models similar to Colorado's with mixed results. In 2025, Virginia's legislature passed the High-Risk AI Developer and Deployer Act (HB 2094), which would have required developers to exercise a duty of care to mitigate discriminatory impacts and report incidents of algorithmic discrimination to the attorney general.²⁵² However, Governor Glenn Youngkin vetoed the bill in March, arguing that existing laws adequately address AI harms and warning that new regulations would burden startups.²⁵³ In 2024, a veto threat by Connecticut Governor Ned Lamont killed a similar bill (SB 2) after it cleared the state Senate.²⁵⁴

Not all state AI laws are restrictive. Some are incentive-based compliance regimes that reward, rather than merely punish, AI innovators. One approach is the creation of "regulatory sandboxes," which are government-run platforms that enable businesses to test new AI applications in controlled environments under regulatory supervision.²⁵⁵ For example, Utah's Artificial Intelligence Policy Act of 2024 established an AI Learning Laboratory Program that grants participants cure periods before penalties and opportunities to reduce fines if they meet certain requirements.²⁵⁶ In 2025, Delaware became the first state to direct the creation of a regulatory sandbox program for "agentic AI."²⁵⁷ Another way states are incentivizing responsible innovation is through regulatory safe harbors. Colorado's

other classification protected under the laws of this state or federal law"); *id.* (defining "consequential decisions" as those that have "a material legal or similarly significant effect" on a consumer's education or employment opportunity, a financial service, an essential government service, access to health care, housing, insurance, and more); *id.* § 6-1-1702 (applying a duty to avoid algorithmic discrimination to developers); *id.* § 6-1-1703 (applying a duty to avoid algorithmic discrimination to deployers).

251. *See id.* § 6-1-1703(b).

252. Virginia High-Risk AI Developer and Deployer Act, H.B. 2094, 2025 Gen. Assemb., Reg. Sess. (Va. 2025) (vetoed Mar. 24, 2025).

253. *See Governor's Amendments and Vetoes: 2025 Session of the General Assembly*, VA. DIV. OF LEGIS. SERVS. 92 (2025), <https://dls.virginia.gov/pubs/vetoes/Vetoes2025.pdf> [<https://perma.cc/Z2U3-TDFQ>].

254. *See* Dixon, *supra* note 249.

255. *See* Richard Sentinella, *How Different Jurisdictions Approach AI Regulatory Sandboxes*, IAPP (May 14, 2025), <https://iapp.org/news/a/how-different-jurisdictions-approach-ai-regulatory-sandboxes> [<https://perma.cc/S2A4-VAU3>] (defining sandboxes as "controlled environments" where firms may obtain temporary regulatory relief); REGULATORY SANDBOXES IN ARTIFICIAL INTELLIGENCE, ORG. FOR ECON. COOP. & DEV. 12–16 (2023), https://www.oecd.org/en/publications/regulatory-sandboxes-in-artificial-intelligence_8f80a0e6-en.html [<https://perma.cc/5S68-U3T9>] (discussing the use of regulatory sandboxes to facilitate innovation in AI while maintaining safeguards for accountability and public interest).

256. Utah Artificial Intelligence Policy Act, S.B. 149, 2024 Legis., Gen. Sess. (Utah 2024); Stuart D. Levi et al., *Utah Becomes First State to Enact AI-Centric Consumer Protection Legislation*, SKADDEN ARPS (Apr. 2, 2024), <https://www.skadden.com/insights/publications/2024/04/utah-becomes-first-state> [<https://perma.cc/NBM3-VDYK>] (noting that participants in the Utah AI Lab may receive "12 months of regulatory mitigation" such as delayed restitution and reduced fines (citation modified)).

257. H.J. RES. 7, 153d Gen. Assemb. (Del. 2025). The resolution defines "agentic AI" as "AI systems designed to operate with a significant degree of autonomy, enabling them to make decisions and take actions independently to achieve specific goals." *Id.*

AI Act, for instance, provides a rebuttable presumption of reasonable care for developers who align their practices with recognized standards, like the NIST AI Risk Management Framework. These measures reflect a co-regulatory philosophy, where adherence to federal or industry best practices shields private actors from state-level penalties.²⁵⁸

States are also seeking to clarify intellectual property rights in AI-related contexts. Most notably, a 2025 Arkansas law confers ownership rights in AI models and AI-generated content, provided the input data is legally obtained and ownership rights haven't been contractually transferred.²⁵⁹ In addition, states are protecting against AI-powered impersonation by conferring publicity rights. Tennessee's ELVIS Act, for example, bans the commercial use or public dissemination of AI-generated works utilizing an individual's voice without the individual's consent.²⁶⁰

The foregoing is not a complete catalog of state initiatives. However, it captures trendlines and some key points. State approaches to AI regulation are similar in some respects and different in others. The variations operate along two dimensions: vertically vis-à-vis the federal government and horizontally among the states. Although speculative, the variations are likely to increase over time based on the volume and variety of items on the AI policy agenda.²⁶¹

C. Case Studies

This Section zooms out to put federal and state regulatory efforts into relational context, more as a dynamic interplay than parallel play. It features three case studies. The first two focus on political deepfakes and AI safety. The third recounts a failed attempt in Congress to preempt all state AI regulation.²⁶² Each account offers different lessons, and their synthesis offers more.²⁶³

1. Political Deepfakes

Policymakers at all levels of government are deeply concerned about deepfakes.²⁶⁴ Broadly defined, political deepfakes are AI-generated content

258. COLO. REV. STAT. § 6-1-1702(1) (developer rebuttable presumption); *id.* § 6-1-1703(1) (deployer rebuttable presumption); *id.* § 6-1-1706(3)(b)(I) (affirmative defense tied to NIST RMF) (2024); *see also* UTAH CODE ANN. § 13-75-104(1)(a)–(b) (LexisNexis 2025) (creating a safe harbor for AI chatbot deployers that provide clear and conspicuous disclosures during consumer interactions).

259. *See* H.B. 1876, 95th Gen. Assemb., Reg. Sess. (Ark. 2025) (enacted as 2025 Ark. Acts 927). The Act also includes a “work made for hire” provision. *Id.* § 18-4-101. Under this provision, any resulting content or model training done within the scope of employment will be considered the property of the employer.

260. TENN. CODE ANN. § 47-25-1105(a)(1)–(3) (2024).

261. *See* Jenkins, *supra* note 248 (reporting on the momentum of new proposals and new approaches in state AI regulation in 2025).

262. *See infra* Subsection II.C.1 (political deepfakes), II.C.2 (AI safety), and II.C.3 (preemption moratorium).

263. *See infra* Section II.D (drawing from the case studies to illustrate the values of federalism in the AI context).

264. *See* Jen Easterly, Scott Schwab & Cait Conley, *Artificial Intelligence's Threat to Democracy*, FOREIGN AFFS. (Jan. 3, 2024), <https://www.foreignaffairs.com/united-states/artificial-intelligences-threat-democracy> [<https://perma.cc/YGQ3-KKDP>].

designed to depict political figures saying or doing things they never did.²⁶⁵ These manipulations can distort political discourse, sow confusion, ruin reputations, and potentially skew electoral outcomes.²⁶⁶ While individual deceptive images have long existed, today's AI systems enable the mass production of highly convincing synthetic media at unprecedented scale and speed.²⁶⁷ An occasional photoshopped image can be a problem for election officials and fact-checkers.²⁶⁸ However, it's a different problem if thousands of false images and videos flood the infosphere days before an election or on election day.²⁶⁹

Federal law provides remarkably little protection against political deepfakes. The Federal Election Campaign Act of 1971 primarily addresses campaign finance regulations rather than content manipulation.²⁷⁰ The Act contains no provisions explicitly addressing AI-generated media, and its broader provisions on campaign communications do not clearly encompass AI-generated content intended to deceive voters.²⁷¹ Congress has acknowledged the gap.²⁷² Indeed, several bipartisan bills were introduced in the 118th Congress that would regulate the use of deepfakes in federal elections.²⁷³ Republican leaders opposed the bills,

265. LAURIE HARRIS & KELLEY M. SAYLER, CONG. RSCH. SERV., IF11333, DEEP FAKES AND NATIONAL SECURITY 1 (2023) (“Though definitions vary, deep fakes are most commonly described as forgeries created using techniques in machine learning . . .”).

266. See Alex Seitz-Wald & Mike Memoli, *Fake Joe Biden Robocall Tells New Hampshire Democrats Not to Vote Tuesday*, NBC NEWS (Jan. 22, 2024, at 08:45 PT), <https://www.nbcnews.com/politics/2024-election/fake-joe-biden-robocall-tells-new-hampshire-democrats-not-vote-tuesday-rcna134984> [<https://perma.cc/32HH-CSG5>]; see also Vittoria Elliot, *The WIRED AI Elections Project*, WIRED (May 30, 2024, at 05:00 MT), <https://www.wired.com/story/generative-ai-global-elections/> [<https://perma.cc/6KW8-XJLS>] (tracking instances of AI's use in political campaigns).

267. See *Tracker: Legislation on Deepfakes in Elections*, PUB. CITIZEN, <https://www.citizen.org/article/tracker-legislation-on-deepfakes-in-elections/> [<https://perma.cc/Q828-7RPX>] (last visited Oct. 15, 2025) (“The rapid development of [AI] poses a myriad of serious threats to our democracy, from supercharging disinformation to making it easier to manipulate voters.”); Raluca Csernaton, *Can Democracy Survive the Disruptive Power of AI?*, CARNEGIE ENDOWMENT FOR INT’L PEACE (Dec. 18, 2024), <https://carnegieendowment.org/research/2024/12/can-democracy-survive-the-disruptive-power-of-ai?lang=en> [<https://perma.cc/5A8V-QEVJ>].

268. See *Tracker: Legislation on Deepfakes in Elections*, *supra* note 267; Csernaton, *supra* note 267.

269. Cf. Josh A. Goldstein et al., *Generative Language Models and Automated Influence Operations: Emerging Threats and Potential Mitigations*, ARXIV 1 (Jan. 10, 2023), <https://arxiv.org/pdf/2301.04246> [<https://perma.cc/CC6J-MDR8>] (contemplating the “prospect of highly scalable . . . campaigns by those seeking to covertly influence public opinion”).

270. See Federal Election Campaign Act of 1971, Pub. L. No. 92-225, 86 Stat. 3 (1972).

271. R. SAM GARRETT, CONG. RES. SERV., IN12222, ARTIFICIAL INTELLIGENCE (AI) AND CAMPAIGN FINANCE POLICY: RECENT DEVELOPMENTS 1 (2024) (“No federal statute or regulation specifically addresses artificial intelligence (AI) in political campaigns.”).

272. See *id.*

273. See Rebecca Klar, *Election-Related AI Bills Test Bipartisan Support for Regulation*, THE HILL (May 15, 2024, at 16:05 ET), <https://thehill.com/policy/technology/4666277-election-related-ai-bills-test-bipartisan-support-for-regulation/>

citing concerns about censorship of political speech, which killed the bills.²⁷⁴ Meanwhile, the Federal Elections Commission (“FEC”) expressed rare bipartisan support for regulating political deepfakes.²⁷⁵ But the overruling of *Chevron* and the threat of protracted litigation were more than enough to stop the federal effort in its tracks.²⁷⁶

Meanwhile, at least 20 states enacted political deepfake laws in the run-up to the 2024 elections.²⁷⁷ The state approaches are similar in many respects, but also different. For example, all apply to false depictions of candidates, but some also cover election officials.²⁷⁸ While some states impose criminal sanctions, others impose civil liability.²⁷⁹ Some jurisdictions confer exclusive enforcement authority on agency officials, whereas others allow private rights of action.²⁸⁰ As states innovate, they also iterate. For example, in 2024, California updated a preexisting

[<https://perma.cc/XD2V-ENNG>]; Joe Davidson, *Senate Pursues Action Against AI Deepfakes in Election Campaigns*, WASH. POST (Apr. 26, 2024), <https://www.washingtonpost.com/politics/2024/04/26/senate-deepfakes-campaigns-ban/> [<https://perma.cc/V4XM-DY4C>].

274. See Alexander Bolton, *McConnell Opposes Bill to Ban Use of Deceptive AI to Influence Elections*, THE HILL (May 15, 2024, at 11:41 ET), <https://thehill.com/policy/technology/4665499-mcconnell-opposes-bill-to-ban-use-of-deceptive-ai-to-influence-elections/> [<https://perma.cc/B8YM-LXUG>].

275. See David Garr, *Comments Sought on Amending Regulation to Include Deliberately Deceptive Artificial Intelligence in Campaign Ads*, FED. ELECTION COMM’N (Aug. 16, 2023), <https://www.fec.gov/updates/comments-sought-on-amending-regulation-to-include-deliberately-deceptive-artificial-intelligence-in-campaign-ads/> [<https://perma.cc/WZ83-AN9S>]. The Federal Communications Commission (“FCC”) also expressed interest in regulating political deepfakes in the run-up to the 2024 election but took no final action. See Letter from Ellen L. Weintraub, Vice Chair, Fed. Election Comm’n, to Jessica Rosenworcel, Chairwoman, Fed. Commc’ns Comm’n, on Political Deepfakes in the 2024 Election (June 6, 2024); Press Release, Fed. Commc’ns Comm’n, FCC Takes First Step in New Transparency Effort to Disclose AI-Generated Content in Political Ads (July 25, 2024); Jason Torchinsky & Oliver Roberts, *FEC Issues No New Rulemaking in the Use of AI by Political Campaigns*, AM. ASS’N POL. CONSULTANTS (Sep. 20, 2024), <https://theaapc.org/fec-issues-no-new-rulemaking-in-the-use-of-ai/> [<https://perma.cc/S4HZ-LTTD>].

276. See Memorandum from Sean J. Cooksey, Chairman, Allen J. Dickerson, Comm’r, & James E. “Trey” Trainor III, Comm’r, to the Fed. Election Comm’n (Sep. 19, 2024), <https://www.fec.gov/resources/cms-content/documents/mtgdoc-24-29-A.pdf> [<https://perma.cc/9WZJ-YYRS>].

277. See *25 States Enact Laws to Regulate Election Deepfakes*, PUB. CITIZEN (May 13, 2025), <https://www.citizen.org/news/25-states-enact-laws-to-regulate-election-deepfakes/> [<https://perma.cc/K6TK-JMVE>] (announcing Montana as the twenty-fifth state with a law targeting political deepfake dissemination); *Deepfakes in Electoral Campaigns*, MULTISTATE.AI, <https://www.multistate.ai/deepfakes-elections> [<https://perma.cc/N45M-M8CW>] (last visited Dec. 1, 2024).

278. See, e.g., CAL. ELEC. CODE § 20010 (2024); WASH. REV. CODE ANN. § 42.62.020 (LexisNexis 2024); MINN. STAT. ANN. § 609.771 (West 2024).

279. TEX. ELEC. CODE § 255.004 (West 2024) (criminal penalties only); MINN. STAT. ANN. § 609.771 (imposing criminal penalties and fines).

280. See MINN. STAT. ANN. § 609.771, subdiv. 4; Bill Kramer, *Can State Laws Actually Stop Political Deepfakes?*, MULTISTATE.AI (Apr. 15, 2024), <https://www.multistate.ai/updates/vol-22> [<https://perma.cc/M7D6-547B>].

law to more explicitly and unambiguously cover AI deepfake technologies that were unforeseen when the original law was passed in 2019.²⁸¹

State restrictions on AI-generated content must also grapple with the First Amendment. Citing constitutional concerns, Louisiana Governor Jeff Landry vetoed two political deepfake bills in 2024.²⁸² But other states pressed on, tailoring their laws to comply with the First Amendment in different ways. For example, many states included malicious intent as an element of offense, but not all did.²⁸³ All states limited the application of their laws to a period before an election, but the timeframes varied.²⁸⁴ Furthermore, most states included exemptions for satire and parody, but not all did.²⁸⁵ Most states exempt traditional media outlets under certain conditions, but the conditions vary slightly.²⁸⁶

Several lessons can be drawn from this case study. Most notably, states addressed an issue of both local and national concern, while the federal government did not. Whether the First Amendment justifies legislative inaction is a complex question. Without state experimentation, however, we might never get an answer. Better yet, with state action, we might get several answers from their varied approaches.

2. *AI Safety*

Broadly defined, AI safety is a field of study addressed at large-scale harms caused by rogue actors using AI systems or socially misaligned AI systems that eclipse human control.²⁸⁷ Both became a headline concern in 2023 on the heels of

281. See, e.g., Assemb. B. No. 2655, 2023–2024 Leg., Reg. Sess. (Cal. 2024). California’s political deepfake law was immediately challenged and preliminarily enjoined on First Amendment grounds. See *Kohls v. Bonta*, 752 F. Supp. 3d 1187, 1199 (E.D. Cal. 2024) (“Most of AB 2839 acts . . . as a blunt tool that hinders humorous expression and unconstitutionally stifles the free and unfettered exchange of ideas which is so vital to American democratic debate.”).

282. Memorandum from Jeff Landry, La. Governor, to Phillip R. DeVillier, Speaker, La. House of Representatives (June 20, 2024), <https://www.legis.la.gov/legis/ViewDocument.aspx?d=1382553> [<https://perma.cc/7HRJ-NQLT>] (“While I applaud the efforts to prevent false political attacks, I believe this bill creates serious First Amendment concerns as it relates to emerging technologies.”).

283. See *Deepfakes in Electoral Campaigns*, *supra* note 277; MINN. STAT. ANN. § 609.771, subdiv. 2(a)(2) (imposing standard of “intent to injure”); COLO. REV. STAT. § 1-46-103(1) (2024) (imposing standard of “know[ledge] or “reckless disregard”).

284. Compare COLO. REV. STAT. § 1-46-103(1) (2024) (prohibiting distribution of undisclosed deepfakes “sixty days before a primary election or ninety days before a general election”), with TEX. ELEC. CODE § 255.004(d)(2) (30 days before election).

285. See Colo. Rev. Stat. § 1-46-103(2), (3) (2024) (exempting communications that are “satire or parody” when accompanied by proper disclosures); MINN. STAT. ANN. § 609.771 (containing no explicit satire or parody exemption); Kramer, *supra* note 230.

286. See Timothy Nelson, *With Election Season in Full Swing, Many States Legislate on Deepfakes in Political Ads—Broadcasters Among Those Caught in the Crosshairs*, JD SUPRA (May 22, 2024), <https://www.jdsupra.com/legalnews/with-election-season-in-full-swing-many-1847771/> [<https://perma.cc/R4PU-YD8D>].

287. See, e.g., TIM G.J. RUDNER & HELEN TONER, CTR. FOR SEC. & EMERGING TECH., KEY CONCEPTS IN AI SAFETY: AN OVERVIEW 6 (2023); Inioluwa Deborah Raji & Roel

ChatGPT's public release.²⁸⁸ In a zeitgeist moment, OpenAI's CEO Sam Altman testified before the Senate Judiciary Committee about the transformative potential and risks of frontier AI models.²⁸⁹ Addressing the dangers, Altman was candid: "If this technology goes wrong, it can go quite wrong."²⁹⁰

Shortly thereafter, the CEO of Anthropic testified before a Senate Judiciary subcommittee that the misuse of advanced AI models could lead to catastrophic events, such as biochemical attacks.²⁹¹ To punctuate the point, a group of highly acclaimed AI researchers and hundreds of industry insiders issued a one-sentence open letter, stating in full: "Mitigating the risk of extinction from AI should be a global priority alongside other societal-scale risks such as pandemics and nuclear war."²⁹² That the warnings hail from within the industry is a reason to pay attention. At the same time, however, disagreement abounds about the nature of the risk, what to do about it, when to do it, and who should decide.²⁹³ For politicians and public citizens seeking cues or clues, it is hard to know what to think. The utter lack of consensus is why this case study is so compelling for AI policy in general and AI federalism specifically.

Those who are concerned about AI safety are especially concerned about the lack of national safeguards. President Biden's landmark Executive Order 14,110 took AI safety quite seriously. Even then, the order imposed no substantive requirements or restrictions on the industry juggernauts. For example, the order mandated that developers of the most powerful AI systems report their safety test results to the federal government, but did not require any specific tests or government preclearance.²⁹⁴ Moreover, as earlier noted, the order directed NIST to create nonbinding safety standards.²⁹⁵ President Trump's repeal of Executive

Dobbe, *Concrete Problems in AI Safety, Revisited*, ARXIV 1 (Dec. 18, 2023), <https://arxiv.org/pdf/2401.10899> [<https://perma.cc/6MEV-E9Q2>].

288. See, e.g., *The End of Humanity: How Real is the Risk?*, TIME (June 12, 2023), <https://time.com/magazine/south-pacific/6284502/june-12th-2023-vol-201-no-21-asia-south-pacific/> [<https://perma.cc/5VT2-QHGA>].

289. *Oversight of A.I.: Rules for Artificial Intelligence: Hearing Before the Subcomm. on Priv., Tech., & the L. of the S. Comm. on the Judiciary*, 118th Cong. 6–7 (2023) [hereinafter *Oversight of A.I.*].

290. *Id.* at 13. (statement of Sam Altman, CEO, OpenAI).

291. See *Oversight of A.I.*, *supra* note 289, at 6–8 (statement of Dario Amodei, CEO, Anthropic).

292. *Statement on AI Risk*, CTR. FOR AI SAFETY (May 30, 2023), <https://www.safe.ai/statement-on-ai-risk> [<https://perma.cc/WYE7-5PLC>].

293. See, e.g., Adam Bales, William D'Alessandro & Cameron Domenico Kirk-Giannini, *Artificial Intelligence: Arguments for Catastrophic Risk*, WILEY (Jan. 24, 2024), <https://compass.onlinelibrary.wiley.com/doi/pdf/10.1111/phc3.12964>

[<https://perma.cc/VKW9-RKP6>] (studying the debate in detail); Daron Acemoglu, *The AI Safety Debate Is All Wrong*, PROJECT SYNDICATE (Aug. 5, 2024), <https://www.project-syndicate.org/commentary/ai-safety-human-misuse-more-immediate-risk-than-superintelligence-by-daron-acemoglu-2024-08> [<https://perma.cc/W346-52MU>]; Schneier & Sanders, *supra* note 71 (discussing a range of political and social worldviews competing for dominance in the AI ecosystem).

294. See Exec. Order No. 14,110, *supra* note 16, § 4.2 (reporting requirements).

295. See *id.* § 4.1(a)(i)–(ii) (NIST safety testing).

Order 14,110 came as no surprise.²⁹⁶ In 2024, the Republican party platform described Executive Order 14,110 as a “dangerous” hindrance to innovation that imposed “Radical Leftwing ideas” on the development of this technology.²⁹⁷

The mood swings in Congress were also telling. After giving much attention to the issue of AI safety in 2023, a bipartisan caucus led by Senator Schumer (D-NY) released a highly anticipated “Roadmap for AI Policy” in 2024 that scarcely mentioned AI safety.²⁹⁸ Instead, it emphasized the need for a light-touch regulatory approach and significantly more government funding for AI research and development.²⁹⁹ Likewise, a bipartisan House AI Report echoed these priorities and downplayed AI safety.³⁰⁰

As momentum stalled in Congress, AI safety advocates pivoted to the states. Enter California. In 2024, approximately 50 AI-related bills were introduced in the state.³⁰¹ But one bill—SB 1047—stood out.³⁰² If enacted, SB 1047 would have imposed risk mitigation requirements, state oversight, whistleblower protections, and liability in the event of “critical harm,” defined to include damages incurred in the state that exceed \$500 million.³⁰³ SB 1047 targeted “only the largest developers while exempting small startups, small businesses, and academics.”³⁰⁴ The bill

296. See Initial Rescissions of Harmful Executive Orders and Actions, Exec. Order No. 14,148, 90 Fed. Reg. 8237 (Jan. 20, 2025) (rescinding Exec. Order No. 14,110); The White House, Removing Barriers to American Leadership in Artificial Intelligence, Exec. Order No. 14,179, 90 Fed. Reg. 8741 (Jan. 23, 2025) (implementing revocation of Exec. Order No. 14,110); Harry Booth, *Republicans’ Vow to Repeal Biden’s AI Executive Order Has Some Experts Worried*, TIME (July 11, 2024), <https://time.com/6996927/republicans-repeal-biden-ai-executive-order/> [<https://perma.cc/Y6JT-XVS3>].

297. 2024 Republican Party Platform, AM. PRESIDENCY PROJECT (July 8, 2024), <https://www.presidency.ucsb.edu/documents/2024-republican-party-platform> [<https://perma.cc/UDG7-F8PV>].

298. See SENATE AI ROADMAP, *supra* note 96; see also Tyler Cowen, *The AI ‘Safety Movement’ Is Dead*, BLOOMBERG (May 21, 2024), <https://www.bloomberg.com/opinion/articles/2024-05-21/ai-safety-is-dead-and-chuck-schumer-faces-risks?embedded-checkout=true> [<https://perma.cc/Z8MY-QDAF>].

299. See SENATE AI ROADMAP, *supra* note 96.

300. See HOUSE AI REPORT, *supra* note 96.

301. See Myriah V. Jaworski & Ali Bloom, *A View From California: One Important Artificial Intelligence Bill Down, 17 Others Good To Go*, CLARK HILL (Nov. 5, 2024), <https://www.clarkhill.com/news-events/news/a-view-from-california-one-important-artificial-intelligence-bill-down-17-others-good-to-go/> [<https://perma.cc/8DY6-GKYC>]; see also *Artificial Intelligence (AI) Legislation*, MULTISTATE.AI, <https://www.multistate.ai/legislative-tracking> [<https://perma.cc/NXS6-TW5L>] (last visited Aug. 18, 2025).

302. Safe & Secure Innovation for Frontier Artificial Intelligence Models Act, S.B. 1047, 2023–2024 Leg., Reg. Sess. (Cal. 2024) (vetoed); Governor Gavin Newsom’s Veto Message for S.B. 1047 (Sep. 29, 2024) [hereinafter Governor Gavin Newsom’s Veto Message], <https://www.gov.ca.gov/wp-content/uploads/2024/09/SB-1047-Veto-Message.pdf> [<https://perma.cc/8ZEN-4AXB>].

303. Cal. S.B. 1047 § 22602(g)(1) (defining “critical harm” to include damages in excess of \$500 million).

304. Joshua Turner & Nicol Turner Lee, *Misrepresentations of California’s AI Safety Bill*, BROOKINGS INST. (Sep. 27, 2024), <https://www.brookings.edu/>

contained no preclearance requirement and no private rights of action. Despite its narrow scope, the industry and its allies rallied to kill SB 1047.³⁰⁵ After months of high-profile national debate, Governor Newsom vetoed it.³⁰⁶ However, SB 1047 is not the end of the discussion; it is a catalyst for many more, both narrower and broader.

SB 1047 instigated debate about whether AI systems pose catastrophic risks and, if so, how to regulate such systems without stifling innovation.³⁰⁷ It also prompted vital discussions about risk allocation, accountability, and regulatory design.³⁰⁸ Meanwhile, supporters of the bill were pressed to justify why regulation of speculative risks was necessary now and why existing laws, such as tort law, would not suffice to compensate for catastrophic harm that might occur.³⁰⁹ SB 1047 also brought AI federalism into sharper focus.³¹⁰ Several of the leading AI labs argued that AI safety is a national security issue that should be regulated by the federal government, not states.³¹¹ Moreover, in a rare display, California's

articles/misrepresentations-of-californias-ai-safety-bill/ [https://perma.cc/7LZC-G4EU]; Cal. S.B. 1047 § 22602(e)(1)(A) (limiting coverage to models whose training cost tops \$100 million or uses more than 10²⁶ FLOPs).

305. Maxwell Zeff, *California's Legislature Just Passed AI Bill SB 1047; Here's Why Some Hope the Governor Won't Sign It*, TECHCRUNCH (Aug. 30, 2024, at 13:26 PT), <https://techcrunch.com/2024/08/30/california-ai-bill-sb-1047-aims-to-prevent-ai-disasters-but-silicon-valley-warns-it-will-cause-one/> [https://perma.cc/2QL3-B7VD] (noting that SB 1047 has “drawn the ire of Silicon Valley players large and small”); *see also infra* notes 307–12 and accompanying text (discussing opposition to the bill).

306. *See, e.g., infra* note 312; Turner & Turner Lee, *supra* note 304 (observing that SB 1047 has prompted sharp disagreement over how to balance safety and innovation); Scott Kohler, *All Eyes on Sacramento: SB 1047 and the AI Safety Debate*, CARNEGIE ENDOWMENT FOR INT'L PEACE (Sep. 11, 2024), <https://carnegieendowment.org/posts/2024/09/california-sb1047-ai-safety-regulation?lang=en> [https://perma.cc/5JPL-RNRW] (noting the bill “galvanized a pitched debate weighing innovation, safety, and the appropriate role of government,” and spotlighting questions of risk allocation and regulatory design).

307. *See, e.g.,* Gabriel Weil, *The Pros and Cons of California's Proposed SB-1047 AI Safety Law*, LAWFARE (May 8, 2024, at 10:37 MT), <https://www.lawfaremedia.org/article/california-s-proposed-sb-1047-would-be-a-major-step-forward-for-ai-safety-but-there-s-still-room-for-improvement> [https://perma.cc/4DTM-TEUX] (arguing that existing tort law may be insufficient to compensate for AI catastrophes and that proactive regulation is needed to address speculative but severe risks).

308. *See id.*; Letter from CalChamber-Led Coalition Opposing S.B. 1047 to S. Judiciary Comm. 1–2 (Mar. 26, 2024), <https://ccianet.org/library/calchamber-led-coalition-letter-in-opposition-to-ca-sb-1047/> [https://perma.cc/UHD9-APU9] (warning the bill would “hamstring[] businesses” and “discourage[] economic and technological innovation”).

309. *See* Weil, *supra* note 307.

310. *See* Dean W. Ball et al., *Lawfare Daily: David S. Rubenstein, Dean Ball and Alan Rozenshtein on AI Federalism* (July 5, 2025, at 10:19 MT), <https://www.lawfaremedia.org/article/lawfare-daily--david-rubenstein--dean-ball--and-alan-rozenshtein-on-ai-federalism> [https://perma.cc/LXY5-ZMZV]; *see also* Ball & Rozenshtein, *supra* note 100 (arguing that Congress, not states, should regulate AI models).

311. *See* Zeff, *supra* note 305; *see also* Wes Davis, *OpenAI Exec Says California's AI Safety Bill Might Slow Progress*, THE VERGE (Aug. 21, 2024, at 18:15 MT),

representatives in the U.S. Congress wrote open letters to the bill's sponsor, State Senator Scott Weiner, urging him to pull the plug on SB 1047 as it was heading to Governor Newsom's desk.³¹² Senator Weiner clapped back. The assault on SB 1047, he argued, only reinforced the need for it: "With Congress gridlocked over AI regulation . . . California must act to get ahead of the foreseeable risks presented by rapidly advancing AI while also fostering innovation."³¹³

On this point, Governor Newsom agreed, stating: "[A] California-only approach may well be warranted, especially absent federal action by Congress."³¹⁴ Indeed, under Newsom's leadership, California enacted many significant AI-related laws in 2024 and more in 2025.³¹⁵ However, Newsom thought SB 1047 was premature, potentially too narrow in scope, and required additional study.³¹⁶ Following that study, the California legislature delivered a significantly watered-down AI safety bill, SB 53, which Newsom signed into law in 2025.³¹⁷ As mentioned earlier, SB 53 requires developers of so-called frontier AI models to publish safety frameworks and report potential "critical safety incidents."³¹⁸ It is primarily a transparency and disclosure law, rather than a substantive or liability law. As one commentator quipped, SB 53 transforms SB 1047's "do no harm" approach to

<https://www.theverge.com/2024/8/21/24225648/openai-letter-california-ai-safety-bill-sb-1047> [<https://perma.cc/93XF-46KG>].

312. See Letter from Zoe Lofgren, Ranking Member, House Comm. on Sci., Space, and Tech., to Scott Wiener, Cal. Sen., regarding S.B. 1047 (Aug. 7, 2024), <https://democrats-science.house.gov/imo/media/doc/8.7.24%20to%20Senator%20Wiener.pdf> [<https://perma.cc/U5Y2-V6ZR>]; see also Press Release, Nancy Pelosi, Speaker, House of Representatives, Pelosi Statement in Opposition to Cal. Senate Bill 1047 (Aug. 16, 2024), <https://pelosi.house.gov/news/press-releases/pelosi-statement-opposition-california-senate-bill-1047> [<https://perma.cc/R4E8-HF53>] ("The view of many of us in Congress is that SB 1047 is well-intentioned but ill informed.").

313. Press Release, Scott Wiener, Cal. Sen., Senator Wiener's Groundbreaking Artificial Intelligence Bill Advances to the Assembly Floor with Amendments Responding to Industry Engagement (Aug. 15, 2024), <https://sd11.senate.ca.gov/news/senator-wieners-groundbreaking-artificial-intelligence-bill-advances-assembly-floor-amendments> [<https://perma.cc/DZ2T-AV3N>]; see Press Release, Scott Wiener, Cal. Sen., Senator Wiener Responds to Speaker Emerita Pelosi's Opposition to SB 1047 (Aug. 17, 2024), <https://sd11.senate.ca.gov/news/senator-wiener-responds-speaker-emerita-pelosis-opposition-sb-1047> [<https://perma.cc/K6RZ-DVBU>].

314. See Governor Gavin Newsom's Veto Message, *supra* note 302.

315. *Id.* (noting that he had signed "over a dozen bills regulating specific, known risks posed by AI"); see also MULTISTATE.AI Tracker, *supra* note 8 (reporting that California enacted at least 18 AI-related bills in 2024).

316. See Governor Gavin Newsom's Veto Message, *supra* note 302.

317. See Governor Newsom Signs SB 53, *Advancing California's World-Leading Artificial Intelligence Industry*, GOVERNOR GAVIN NEWSOM (Sep. 29, 2025), <https://www.gov.ca.gov/2025/09/29/governor-newsom-signs-sb-53-advancing-californias-world-leading-artificial-intelligence-industry> [<https://perma.cc/3KZ5-HXUB>].

318. See Aden Hizkias, *Why California's SB 53 Still Gets AI Regulation Wrong: And How It Compares to Last Year's SB 1047*, CHAMBER OF PROGRESS (July 9, 2025), <https://progresschamber.org/insights/why-californias-sb-53-still-gets-ai-regulation-wrong/> [<https://perma.cc/5VMC-X8TE>] (critically contrasting SB 53 and SB 1047).

“show your work.”³¹⁹ It removes the core “reasonable care” duty in SB 1047³²⁰ and requires only reporting safety incidents and disclosing safety-testing measures.³²¹

Other states are likely to follow California’s lead on AI safety, though to what extent remains unclear. In 2025, the New York legislature passed the Responsible AI Safety and Education (“RAISE”) Act.³²² Like SB 1047, the RAISE Act targets developers of large-scale AI models.³²³ And it mandates the creation of comprehensive safety plans to prevent “critical harm,” defined as catastrophic events causing substantial fatalities or severe economic damage.³²⁴ Moreover, the Act would require developers to conduct risk assessments and report any significant safety incidents to the State. At the time of this writing, the Act awaits Governor Hochul’s approval or veto.

3. Preemption Moratorium

The third case study examines a failed congressional gambit to halt all state-level AI regulation. Unlike the previous studies, which focused on specific risks and policy debates, this final study centers on a second-order structural battle over the authority to regulate AI.

In mid-2025, House Republicans quietly inserted a sweeping 10-year moratorium on state AI regulation into a must-pass budget reconciliation package backed by the Trump Administration.³²⁵ The preemption provision was a direct response to the proliferation of state-level AI laws and had no relation to the Act’s key components.³²⁶ The preemption proposal would have “prohibite[d] states and localities from limiting, restricting, or otherwise regulating [AI] models, AI

319. *Id.*

320. Safe & Secure Innovation for Frontier Artificial Intelligence Models Act, S.B. 1047, 2023–2024 Leg., Reg. Sess. (Cal. 2024) (vetoed) (proposed § 22603(a) required developers to exercise reasonable care to avoid producing covered models posing unreasonable risk of critical harm).

321. *See* Hizkias, *supra* note 318.

322. *See* Responsible AI Safety and Education (“RAISE”) Act, Assemb. B. A6453A, 252d Leg., 2025–2026 Reg. Sess. (N.Y. 2025).

323. *Id.*

324. *See* Press Release, Andrew Gouardes, N.Y. Sen., Sen. Gouardes’s AI Safety Bill Passes State Senate (June 12, 2025), <https://www.nysenate.gov/newsroom/press-releases/2025/andrew-gouardes/sen-gouardes-ai-safety-bill-passes-state-senate> [<https://perma.cc/9HUX-2VLT>].

325. H.R. 1, 119th Cong. § 43201 (as passed by House, May 22, 2025).

326. *See, e.g.*, Kevin Frazier & Adam Thierer, *1,000 AI Bills: Time for Congress to Get Serious About Preemption*, LAWFARE (May 9, 2025, at 09:23 MT), <https://www.lawfaremedia.org/article/1-000-ai-bills--time-for-congress-to-get-serious-about-preemption> [<https://perma.cc/5LTF-MN4Y>]; Justin Hendrix, *US House Committee Advances 10-Year Moratorium on State AI Regulation*, TECH POL’Y PRESS (May 13, 2025), <https://www.techpolicy.press/us-house-committee-advances-10-year-moratorium-on-state-ai-regulation/> [<https://perma.cc/JW6R-5XCZ>]. The preemption provision links back to a think-tank proposal by libertarian scholar Adam Thierer. *See* Adam Thierer, *Getting AI Policy Right Through a Learning Period Moratorium*, R ST. INST. (May 29, 2024), <https://www.rstreet.org/commentary/getting-ai-policy-right-through-a-learning-period-moratorium/> [<https://perma.cc/7UKK-TTDC>].

systems, or automated decision systems entered into interstate commerce for 10 years.”³²⁷ If enacted, this single provision would have quashed state-level efforts to regulate AI without any federal framework to replace them.³²⁸

The technology industry and its allies, led by the U.S. Chamber of Commerce, mounted a vigorous defense of the preemption provision.³²⁹ They argued that a “patchwork” of 50 different state AI laws would stifle innovation, create immense compliance costs, and hinder the United States’ ability to compete with China.³³⁰ Merits aside, the use of the budget reconciliation process was a calculated strategy. It allowed for an expedited legislative process, bypassing key vetogates like the filibuster.³³¹ In addition, the sheer size, scope, and substance of the bill (from Medicaid and tax cuts to unprecedented new funding for immigration enforcement) would command public attention, not some arcane and unrelated AI preemption tack-on.³³²

At first, the strategy seemed to work. Many House members who voted in favor of the omnibus bill were unaware of the preemption provision, much less its socio-political implications.³³³ But blowback swiftly followed, including within

327. H.R. 1 § 43201. The preemption provision originated in the House Energy and Commerce Committee under Chairman Brett Guthrie (R-KY), who introduced the measure as part of the massive budget reconciliation package. *See* Hendrix, *supra* note 326. Contemporaneously, Senator Ted Cruz (R-TX) voiced strong support for a similar measure in the Senate. *See, e.g.*, Press Release, Ted Cruz, Tex. Sen., Sen. Cruz: Adopting Europe’s Approach on Regulation Will Cause China to Win the AI Race (May 8, 2025), <https://www.commerce.senate.gov/2025/5/sen-cruz-adopting-europe-s-approach-on-regulation-will-cause-china-to-win-the-ai-race> [<https://perma.cc/P74N-HHMF>] (announcing intention to introduce a federal bill that will, *inter alia*, “remove barriers to AI adoption” and “prevent needless state over-regulation”).

328. *See* David S. Rubenstein, *AI Governance Needs Federalism, Not a Federally Imposed Moratorium*, JUST SEC. (May 29, 2025), <https://www.justsecurity.org/113728/ai-governance-federalism-moratorium/> [<https://perma.cc/T933-L9AT>].

329. *See* Michael Richards, *Congress Must Pass an AI Moratorium*, U.S. CHAMBER OF COM. (June 6, 2025), <https://www.uschamber.com/technology/artificial-intelligence/congress-must-pass-an-ai-moratorium> [<https://perma.cc/SM3C-BPV4>].

330. *See id.*

331. *See* BILL HENIFF JR., CONG. RSCH. SERV., RL30862, THE BUDGET RECONCILIATION PROCESS: THE SENATE’S “BYRD RULE,” at ii (2022), https://www.congress.gov/crs_external_products/RL/PDF/RL30862/RL30862.20.pdf [<https://perma.cc/5YZ8-N6Q9>] (“Reconciliation is a procedure under the Congressional Budget Act of 1974 by which Congress implements budget resolution policies affecting mainly permanent spending and revenue programs.”).

332. *See* COUNCIL OF ECON. ADVISERS, EXEC. OFF. OF THE PRESIDENT, THE ONE BIG BEAUTIFUL BILL: LEGISLATION FOR HISTORIC PROSPERITY AND DEFICIT REDUCTION 1 (2025), <https://www.whitehouse.gov/wp-content/uploads/2025/08/The-One-Big-Beautiful-Bill-Legislation-for-Historic-Prosperty-and-Deficit-Reduction.pdf> [<https://perma.cc/53DH-JLCT>].

333. *See, e.g.*, Rep. Marjorie Taylor Greene (@RepMTG), X, *I did not know about this section on pages 278-279 of the OBBB that strips states of the right to make laws or regulate AI for 10 years.* (June 3, 2025, at 10:02 MT), <https://x.com/RepMTG/status/1929946902566494653> [<https://perma.cc/U35J-EEBM>] (announcing, after the fact, that she was not aware of the provision when she voted in favor of the reconciliation bill).

Republican ranks. House Rep. Marjorie Taylor Greene (R-GA), for example,³³⁴ admitted she “would have voted NO if [she] had known this was in there,”³³⁵ and argued that giving “free rein” to AI while “tying state hands” would be “potentially dangerous.”³³⁶ Meanwhile, legal scholars and state attorneys general warned that a direct federal command to states to not legislate in a particular field was likely unconstitutional.³³⁷

In response, Senate Republicans attempted a tactical rewrite. Ted Cruz (R-TX), as Chair of the Senate Commerce Committee, transformed the provision from a direct prohibition on state AI regulation into a conditional spending grant.³³⁸ Rather than forbidding state action, the revision threatened to strip states of federal funding for technology infrastructure projects.³³⁹ In effect, the revised provision would make states choose between critical infrastructure and protecting their citizens from AI-related harms.

As the Senate prepared to vote, an unusual constellation of voices on both the left and right converged in opposition. On the right, Senators like Marsha Blackburn (R-TN), Josh Hawley (R-MO), and Rand Paul (R-KY), along with the Heritage Foundation, objected to the measure as a federal overreach.³⁴⁰ Steve Bannon, a former Trump advisor and MAGA influencer, blasted the provision on

334. *Id.*

335. *Id.*

336. *Id.*

337. See Press Release, U.S. Senate Comm. on Com., Sci., and Transp., State Attorneys General Tell Congress: AI Moratorium Will Leave Consumers, Citizens Vulnerable to AI Fraud, Theft & Other Harms (June 18, 2025) [hereinafter AI Moratorium Press Release], <https://www.commerce.senate.gov/2025/6/state-attorneys-general-tell-congress-ai-moratorium-will-leave-consumers-citizens-vulnerable-to-ai-fraud-theft-other-harms> [<https://perma.cc/PF38-2HAH>]; Rubenstein, *supra* note 328; see also *infra* notes 461–77 and accompanying text (discussing constitutional challenges relating to the preemption proposal).

338. See COMM. ON COM., SCI., & TRANSP., SUPPORT FOR ARTIFICIAL INTELLIGENCE UNDER THE BROADBAND EQUITY, ACCESS, AND DEPLOYMENT PROGRAM 26–33 (2025), <https://www.commerce.senate.gov/services/files/AD3D04CF-52B4-411F-854B-44C55ABBADDA> [<https://perma.cc/X85N-D78R>].

339. *Id.* at 31; Associated Press, *Senate Republicans Revise Ban on State AI Regulations in Bid to Preserve Controversial Provision*, U.S. NEWS (June 6, 2025), <https://www.usnews.com/news/us/articles/2025-06-06/senate-republicans-revise-ban-on-state-ai-regulations-in-bid-to-preserve-controversial-provision> [<https://perma.cc/XG8U-CS58>].

340. See Daniel Cochrane, *Federal AI Power Grab Could End State Protections for Kids and Workers*, HERITAGE FOUND. (June 9, 2025), <https://www.heritage.org/big-tech/commentary/federal-ai-power-grab-could-end-state-protections-kids-and-workers> [<https://perma.cc/44J9-D8VQ>]; Will Oremus, *How Tech’s Bold Bid to Curb AI Laws Fell Apart*, WASH. POST (July 1, 2025), <https://www.washingtonpost.com/technology/2025/07/01/ai-moratorium-defeat-senate-silicon-valley/> [<https://perma.cc/7GQN-7HKS>]; Owen Dahlkamp, *Ted Cruz Wants to Stop States from Regulating AI. Some of His Republican Colleagues Aren’t So Sure*, TEX. TRIB. (June 27, 2025, at 10:00 CT), <https://www.texastribune.org/2025/06/27/ted-cruz-ai-moratorium-reconciliation-republicans-congress-trump/> [<https://perma.cc/XZS2-VEQ6>].

his influential War Room podcast.³⁴¹ At the same time, a wide coalition of civil rights organizations, consumer protection groups, and labor unions argued that the moratorium would create a regulatory vacuum, gutting state-level protections against algorithmic discrimination in hiring, housing, and credit.³⁴²

A bipartisan coalition of 260 state legislators across all 50 states also weighed in, expressing their strong opposition in a signed letter.³⁴³ So did 40 state attorneys general from both parties.³⁴⁴ Even the Republican Governors Association urged Congress to excise the AI moratorium provision from the reconciliation bill.³⁴⁵ After a last-ditch effort to save the moratorium failed,³⁴⁶ the Senate voted 99–1 to strip the moratorium from the bill.³⁴⁷ When the reconciliation bill returned to

341. Tina Nguyen, *The Unholy Alliance That Killed the AI Moratorium*, THE VERGE (July 11, 2025, at 08:00 MT), <https://www.theverge.com/politics/704424/ai-moratorium-ted-cruz-steve-bannon-trump> [<https://perma.cc/2TMK-DWDH>] (reporting on Steve Bannon’s campaign on War Room podcast against AI preemption moratorium).

342. See Letter from Common Sense Media et al. to John Thune, Senate Majority Leader, Chuck Schumer, Minority Leader, and Members of the U.S. Senate (June 30, 2025), <https://ari.us/wp-content/uploads/2025/06/Coalition-Letter-Oppose-the-Updated-AI-Moratorium.pdf> [<https://perma.cc/C9RP-AWGT>].

343. Letter from Brandon Guffrey, Rep., S.C. House of Representatives, et al. to Members of the U.S. House of Representatives and the U.S. Senate (June 3, 2025), <https://ari.us/wp-content/uploads/2025/06/State-Policymaker-Coalition-Letter-Oppose-AI-Preemption-6-3-25.pdf> [<https://perma.cc/9Z4U-CB9D>]; Linn F. Freedman, *State Lawmakers Oppose Proposed 10 Year Freeze on AI Laws + Regulations*, NAT’L L. REV. (June 5, 2025), <https://natlawreview.com/article/state-lawmakers-oppose-proposed-10-year-freeze-ai-laws-regulations> [<https://perma.cc/Y8XP-LWQE>].

344. See AI Moratorium Press Release, *supra* note 337; Letter from Nat’l Ass’n of Att’ys Gen. to Mike Johnson, Speaker, House of Representatives, et al. (May 16, 2025), https://oag.ca.gov/system/files/attachments/press-docs/2025.05.15-Letter-to-Congress-re-Proposed-AI-Preemption-_FINAL.pdf [<https://perma.cc/RQ3Z-JCY2>].

345. *Republican Governors Praise One Big Beautiful Bill, Urge Congress to Allow States to Protect Citizens from Misuse of Artificial Intelligence*, REPUBLICAN GOVERNORS ASS’N (June 27, 2025), <https://www.rga.org/republican-governors-praise-one-big-beautiful-bill-urge-congress-allow-states-protect-citizens-misuse-artificial-intelligence/> [<https://perma.cc/QYY8-VYP6>].

346. See COMM. ON COM., SCI., & TRANSP., SUPPORT FOR ARTIFICIAL INTELLIGENCE UNDER THE BROADBAND EQUITY, ACCESS, AND DEPLOYMENT PROGRAM 7–8 (2025), <https://www.blackburn.senate.gov/services/files/178AE7B5-7583-415E-8CF3-475241C6E5F9Will> [<https://perma.cc/EJ9Y-BEML>] (revised proposal); Oremus, *supra* note 340 (discussing the “deal” struck by Senators Cruz and Blackburn “to preserve the essence of a moratorium” on state AI regulations).

347. See Kevin Collier & Bruna Horvath, *‘Big, Beautiful Bill’ Passes Senate Without AI-Law Moratorium*, NBC NEWS (July 1, 2025, at 10:28 PT), <https://www.nbcnews.com/tech/tech-news/big-beautiful-bill-ai-moratorium-ted-cruz-pass-vote-rcna215111> [<https://perma.cc/X6D8-Z3ND>]; Jack Nicastro, *Senate Votes 99–1 To Remove AI Moratorium from ‘Big, Beautiful Bill’*, REASON (July 1, 2025, at 12:27 MT), <https://reason.com/2025/07/01/senate-votes-99-1-to-remove-ai-moratorium-from-big-beautiful-bill/> [<https://perma.cc/4AHY-7TKD>]. The lone dissenting vote was reportedly cast in error by Senator Thom Tillis (R-NC), who vigorously and openly opposed the bill, and voted no across the board, including to the repealing amendment. Billy Perrigo & Andrew R. Chow, *Senators Reject 10-Year Ban on State-Level AI Regulation, In Blow to Big Tech*, TIME

the House, it quickly passed and was signed into law by President Trump (minus any AI preemption or conditional spending provision).³⁴⁸

Still, the battle over AI federalism is far from over. What began as a stealth provision quickly ignited a widely publicized debate about the future of AI and the role of federalism itself. Industry representatives and sympathetic think tanks have already signaled their intent to pursue similar measures potentially paired with a light-touch federal framework that would provide the constitutional basis to preempt state law.³⁴⁹ In the meantime, the episode has put stakeholders across the political spectrum on high alert.³⁵⁰ What began as a stealth provision quickly ignited a widely publicized debate about the future of AI and the role of federalism itself.

D. Values of AI Federalism

Federalism offers much to celebrate in the dawning AI age. Although not without drawbacks, federalism offers unique values that are not reproducible or available in a fully centralized system.³⁵¹

To start, the political dynamics of decentralized AI governance can accommodate more political preferences than a one-size-fits-all national approach.³⁵² The diversity of state approaches also allows for a natural experiment in AI regulation. Not only do they provide occasions to learn what works and does not, but also for whose benefit, whose detriment, and at what cost. Unlike in a fully centralized system, the state-level experiments can run in parallel, thus enabling faster adaptation feedback loops. Rather than regulate too soon and all at once or too little too late, decentralized states can regulate iteratively and incrementally.

Beyond real-world experiments, states can force thought experiments. When states act as staging grounds, it often brings more voices and viewpoints to bear on issues of shared concern. SB 1047 is a case in point. Unlike the stalled initiatives in Congress, the credible possibility that SB 1047 could become law forced conversations that otherwise might not have occurred.³⁵³ The attempt to hold

(July 1, 2025, at 06:27 MT), <https://time.com/7299044/senators-reject-10-year-ban-on-state-level-ai-regulation-in-blow-to-big-tech/> [<https://perma.cc/LVV4-5VKH>].

348. See One Big Beautiful Bill Act, Pub. L. No. 119-21, 139 Stat. 72 (2025); *President Trump's One Big Beautiful Bill Is Now the Law*, THE WHITE HOUSE (July 4, 2025), <https://www.whitehouse.gov/articles/2025/07/president-trumps-one-big-beautiful-bill-is-now-the-law/> [<https://perma.cc/55T2-P756>].

349. See April Rubin & Maria Curi, *New Push for National AI Rules Likely After Ban on State Regulations Fails*, AXIOS (July 3, 2025), <https://www.axios.com/2025/07/03/artificial-intelligence-moratorium-future-regulation> [<https://perma.cc/MSX9-SH7L>].

350. *Id.*

351. *Gregory v. Ashcroft*, 501 U.S. 452, 458 (1991); see also Barry Friedman, *Valuing Federalism*, 82 MINN. L. REV. 317, 389–404 (1997) (cataloging reasons traditionally associated with federalism); Michael W. McConnell, *Federalism: Evaluating the Founders' Design*, 54 U. CHI. L. REV. 1484, 1493–94 (1987) (arguing that decentralized governments can satisfy a higher proportion of the electorate than would be possible under an exclusively centralized system).

352. See *Gregory*, 501 U.S. at 458 (describing how a decentralized government allows for more policy innovation and experimentation).

353. Zeff, *supra* note 305 (observing that SB 1047 “has become one of the most controversial” AI bills precisely because it has a real chance of becoming law).

the industry accountable, and potentially liable, for their AI creations surfaced fault lines, etched battle lines, and revealed which side of those lines stakeholders stand.³⁵⁴ We learned, for example, that industry giants like OpenAI, Microsoft, and Google vehemently oppose regulation of their frontier AI models, despite expressing support for government oversight in congressional hearings and public relations campaigns.³⁵⁵

While industry advocates bemoan regulatory patchworks, it is partly self-inflicted.³⁵⁶ At the national level, they lobby hard to block AI regulation.³⁵⁷ But the very success of those efforts has created both the incentives and conditions for states to fill the void. Moreover, the industry's rhetoric of 50 independent laboratories is belied by political reality. Closer to the truth, states are staging grounds for networked interest groups and policy entrepreneurs to build coalitions, generate momentum, and instantiate policies where they have political clout.³⁵⁸ In addition,

354. See Bobby Allyn, *California Gov. Newsom Vetoes AI Safety Bill That Divided Silicon Valley*, NPR (Sep. 29, 2024, at 18:18 ET), <https://www.npr.org/2024/09/20/nx-s1-5119792/newsom-ai-bill-california-sb1047-tech> [<https://perma.cc/B8QF-2DT8>]; Garrison Lovely, *California's AI Safety Bill Is a Mask-Off Moment for the Industry*, THE NATION (Aug. 15, 2024), <https://www.thenation.com/article/society/california-ai-safety-bill/> [<https://perma.cc/P7PA-VSCX>] (describing SB 1047 as “a real mask-off moment for the AI industry” that exposed AI companies’ true positions on regulation despite public statements about wanting oversight); Preetika Rana, *AI Companies Fight to Stop California Safety Rules*, WALL ST. J. (Aug. 7, 2024, at 21:20 ET), <https://www.wsj.com/tech/ai/ai-regulation-california-bill-29e40745?msockid=19781c762c5b673b005c0a722d6666d9> [<https://perma.cc/5NB3-FWWS>] (reporting that Microsoft, Meta, Google, and other firms have urged the rejection of SB 1047 or major changes to it).

355. See, e.g., Letter from Jason Kwon, Chief Strategy Officer, OpenAI, to Scott Wiener, Cal. Sen., 1 (Aug. 21, 2024), <https://r2.maginate.com/ca-sb-1047-openai-opposition-letter.pdf> [<https://perma.cc/LNM5-EHWA>] (declaring that OpenAI “respectfully oppos[es] SB 1047” and urging a “federally-driven set of AI policies”); Lawrence Lessig, *Big Tech Is Very Afraid of a Very Modest AI Safety Bill*, THE NATION (Aug. 30, 2024), <https://www.thenation.com/article/society/sb-1047-ai-big-tech-fight/> [<https://perma.cc/Z94J-YVNK>] (“Despite claiming to support AI safety, powerful tech interests are trying to kill SB1047.”).

356. See, e.g., Chamber of Com. of the U.S., Comments in Response to Request for Information on the Development of an Artificial Intelligence Action Plan 2 (Mar. 14, 2025), <https://files.nitrd.gov/90-fr-9088/US-Chamber-of-Commerce-AI-RFI-2025.pdf> [<https://perma.cc/J6K6-944Y>] (expressing concern about a patchwork of state AI regulations); *50-State Patchwork of Privacy Laws Could Cost \$1 Trillion More Than a Single Federal Law*, INFO. TECH. & INNOVATION FOUND. (Jan. 24, 2022), <https://itif.org/publications/2022/01/24/50-state-patchwork-privacy-laws-could-cost-1-trillion-more-single-federal/> [<https://perma.cc/8ZST-5QTK>].

357. See Mohar Chatterjee, *The AI Lobby Plants Its Flag in Washington*, POLITICO (June 6, 2025, at 12:32 ET), <https://www.politico.com/news/2025/06/06/the-ai-lobby-plants-its-flag-in-washington-00389549> [<https://perma.cc/XYJ7-WGZ8>]; Will Henshall, *There's an AI Lobbying Frenzy in Washington. Big Tech Is Dominating*, TIME (Apr. 30, 2024, at 13:05 ET), <https://time.com/6972134/ai-lobbying-tech-policy-surge/> [<https://perma.cc/SFJ8-3KZK>].

358. See Bulman-Pozen, *Partisan Federalism*, *supra* note 13, at 1087–91; Gerken, *Federalism as the New Nationalism*, *supra* note 13, at 1896–98.

model legislation and multi-state working groups foster regulatory cohesion.³⁵⁹ As such, regulatory preferences often sort along party lines, not state borderlines. Although voting is local, the issues and influence over policy outcomes are usually coordinated by multi-state actors.³⁶⁰

That said, federalism is not costless. It is easy to celebrate federalism when it enables policy innovation and democratic participation; it is harder when it creates inefficiencies, inequalities, and enforcement gaps. Regulatory fragmentation across jurisdictions creates compliance burdens for companies operating nationally.³⁶¹ These costs can be particularly burdensome for startups and smaller enterprises, potentially benefiting large technology firms with resources to navigate complex regulatory landscapes.³⁶² Moreover, the decentralized nature of federalism can result in uneven distribution of AI's benefits and burdens.³⁶³ For instance, states with greater technical expertise and resources can implement sophisticated AI oversight mechanisms, potentially leaving other states more exposed to AI risks.³⁶⁴

It must be emphasized, however, that celebrating federalism *includes* the federal government's capacity to intervene and nationalize AI policy, either comprehensively or in specific domains. This underscores two key features of AI federalism: it is politically contingent and structurally dynamic. If one level of government underperforms, another can pick up the slack. If one government pushes

359. See e.g., *Multistate AI Policymaker Working Group*, FUTURE OF PRIV. F., <https://fpf.org/multistate-ai-policymaker-working-group/> [https://perma.cc/CW35-HXQK] (last visited Sep. 30, 2025) (describing bipartisan assembly of over 200 state lawmakers from more than 45 states coordinating AI policy); *Model State Artificial Intelligence Act*, AM. LEGIS. EXCH. COUNCIL (ALEC) (Aug. 30, 2024) <https://alec.org/model-policy/model-state-artificial-intelligence-act/> [https://perma.cc/X6DS-LMZE] (providing model legislation for states); *Study Committee on Use of Artificial Intelligence by State Government*, UNIF. L. COMM'N (July 26, 2023, at 19:55 MT), <https://www.uniformlaws.org/discussion/new-study-and-drafting-committees> [https://perma.cc/Y2CD-FCWN].

360. See Stefani Langehennig, *The Politics of AI Innovation in the US States*, TECH POL'Y PRESS (Jan. 7, 2025), <https://www.techpolicy.press/the-politics-of-ai-innovation-in-the-us-states/> [https://perma.cc/W4AM-BLNU] (analyzing how state AI policymaking reflects partisan control rather than independent experimentation).

361. See Kristian Stout, *Federal Preemption and AI Regulation: A Law and Economics Case for Strategic Forbearance*, WLF LEGAL PULSE (May 30, 2025), <https://www.wlf.org/2025/05/30/wlf-legal-pulse/federal-preemption-and-ai-regulation-a-law-and-economics-case-for-strategic-forbearance/> [https://perma.cc/TWY4-5TW3].

362. See Matt Perault, *Regulate AI Use, Not AI Development*, ANDREESSEN HOROWITZ (Jan. 27, 2025), <https://a16z.com/regulate-ai-use-not-ai-development/> [https://perma.cc/NZV9-KRVJ]; Jennifer Huddleston, *AI and Privacy Rules Meant for Big Tech Could Hurt Small Businesses Most*, CATO INST. (May 20, 2024), <https://www.cato.org/commentary/ai-privacy-rules-meant-big-tech-could-hurt-small-businesses-most> [https://perma.cc/F2LD-NS7V].

363. See generally JACOB M. GRUMBACH, LABORATORIES AGAINST DEMOCRACY: HOW NATIONAL PARTIES TRANSFORMED STATE POLITICS (2022) (presenting a book-length argument that national party influence has eroded the traditional role of states as independent policy laboratories).

364. It is also possible that jurisdictions with the most stringent requirements become the de facto national standard. Under those conditions, the laboratories of democracy—for better or worse—begin to look more like a single lab with multiple locations.

too far, another can push back. Indeed, if states push too far, it may also push Congress to intervene in ways that more modest state laws would not instigate.

* * *

Federalism's structures enable, and sometimes force, difficult but essential tradeoffs about AI's place in society, for whose benefit, on what timescale, and who decides. As states continue to fill the regulatory void, the complex interplay between state and national interests will not be left to politics alone. It will also be shaped and constrained by a durable body of constitutional law, to which the next part turns.

III. FUTURES OF AI FEDERALISM

This Part bridges the origin story of AI federalism to its foreseeable futures. To organize the discussion, the Article conceives three main archetypes. The first is *AI federalism by default* and is the focus of Section A. In this conception, AI federalism emerges organically, with Congress sidelined and with no preset design. Section B turns to alternative federalism configurations, styled *AI federalism by design*. In this imagined future, Congress plays an active role in setting and shaping AI policy. While there are many possible ways for Congress to do so, the focus here is on cooperative federalism arrangements. Section C offers a vision and normative support for a third model, referred to here as *dynamic AI federalism*. Under this conception, AI regulation is never done. It adapts and evolves just like the technology it seeks to govern.

The collection of these alternative visions allows for comparisons. And those comparisons, in turn, serve twin purposes. First, they level-set expectations. The AI federalism we may want is not what we may get. Second, the federalism that we get is not preordained. It can be planned for and designed for. Not perfectly, of course. The challenges of regulating AI are political, social, and technological. No amount of institutional design can overcome or control these dynamics. Still, it is not hopeless. Rather, it is a call to imagine counterfactuals, account for contingencies, and design for continuities.

A. *AI Federalism by Default*

Federalism by default is an extension of the status quo, with Congress mostly sidelined and states leading the way. The specific policies that might emerge are hard to predict and are not the focus here. The aim, instead, is to anticipate and elucidate how federalism doctrines are likely to apply when states regulate AI, but the federal government has not.

1. *Supremacy Clause*

The Constitution's Supremacy Clause provides, in relevant part, that "the Laws of the United States . . . shall be the supreme Law of the Land."³⁶⁵ This language is the foundation of the Court's preemption doctrine.³⁶⁶ There is no dispute

365. U.S. CONST. art. VI, cl. 2.

366. *Gade v. Nat'l Solid Wastes Mgmt. Ass'n*, 505 U.S. 88, 108 (1992).

that federal statutes preempt contrary state law.³⁶⁷ More contentiously, the Court has long held that federal agencies can preempt state law in much the way Congress can: through binding regulations that expressly preempt or conflict with state law.³⁶⁸ These alternative preemption pathways—by Congress and the Executive—raise distinct theoretical, doctrinal, and practical questions for AI federalism. The discussion below thus treats them separately.³⁶⁹

a. Statutory Preemption

Preemption doctrine determines when federal law displaces state regulation and, importantly, when it does not. The Supreme Court has identified two general ways federal statutes can preempt state law.³⁷⁰ First, Congress can preempt state law *expressly* in statutory text.³⁷¹ Second, state law may be *impliedly* preempted when it would frustrate the objectives of federal law or when it would be impossible for private parties to comply with both.³⁷² Whether express or implied, Congress’s intent to displace state law is the “ultimate touchstone” of preemption analysis.³⁷³ Statutory interpretation is thus the starting point. However, as Thomas Merrill observes, preemption analysis also entails some “discretionary judgment about the permissible degree of tension between federal and state law.”³⁷⁴ For these reasons, courts cannot resolve preemption cases abstractly; the outcomes almost always depend on the details of the federal and state laws at issue. Rather than speculate about preemptive conflicts, the discussion below identifies a few doctrinal puzzles likely to arise and recur. The unifying theme is that preemption doctrine will not apply straightforwardly to many AI regulations.

Start with the presumption against preemption.³⁷⁵ This federalism canon tilts the scales in favor of upholding state law when Congress’s preemptive intent is

367. See *Gibbons v. Ogden*, 22 U.S. (9 Wheat.) 1, 211 (1824) (stating that preemption occurs when state laws “interfere with, or are contrary to the laws of Congress, made in pursuance of the constitution”).

368. See *Hillsborough County v. Automated Med. Lab’ys, Inc.*, 471 U.S. 707, 713 (1985); Henry Paul Monaghan, *Supremacy Clause Textualism*, 110 COLUM. L. REV. 731, 740–42 (2010) (explaining that as a “historical matter, ‘Laws . . . made in Pursuance [of the Constitution]’ referred only to Acts of Congress,” but that changed circumstances counsel for broadly interpreting the Supremacy Clause to encompass lawmaking commands of federal agencies and federal courts (emphasis omitted) (footnote omitted)).

369. See *infra* Subsection III.A.1.b (discussing administrative preemption).

370. See, e.g., *Gade*, 505 U.S. at 98; *Fla. Lime & Avocado Growers, Inc. v. Paul*, 373 U.S. 132, 142–43 (1963).

371. See, e.g., *Gade*, 505 U.S. at 108.

372. See, e.g., *Hines v. Davidowitz*, 312 U.S. 52, 67 (1941). The Court infers Congress’s preemptive intent when it would be impossible for private actors to comply with federal and state laws simultaneously or when state law would frustrate the objectives of federal law. See, e.g., *Arizona v. United States*, 567 U.S. 387, 399 (2012); *Pac. Gas & Elec. Co. v. State Energy Res. Conservation & Dev. Comm’n*, 461 U.S. 190, 204 (1983).

373. See, e.g., *Lorillard Tobacco Co. v. Reilly*, 533 U.S. 525, 541 (2001).

374. Thomas W. Merrill, *Preemption and Institutional Choice*, 102 NW. L. REV. 727, 729 (2008).

375. See *Maryland v. Louisiana*, 451 U.S. 725, 746 (1981) (“Consideration under the Supremacy Clause starts with the basic assumption that Congress did not intend to displace state law.”).

unclear.³⁷⁶ Because states are independent sovereigns in the federal system, preemption should not lightly be presumed unless a federal statute reflects Congress's clear and manifest purpose to displace such law.³⁷⁷ In theory, the presumption against preemption aims to ensure that Congress—not courts—decides whether to displace state law.³⁷⁸ In practice, however, courts notoriously apply the canon erratically and inconsistently.³⁷⁹ One factor that tends to make a difference is whether the state law at issue is a matter of “traditional” state concern.³⁸⁰ But whether a subject is a matter of traditional state concern has always been a fraught inquiry.³⁸¹ And there is no reason to expect otherwise for AI. Indeed, the “dual-use” nature of the technology, coupled with its wide-ranging risks, defies dichotomous categorization as either traditional or nontraditional state concerns.³⁸² This creates an analytical puzzle for preemption doctrine centered on sector-specific congressional intent.

For instance, consider AI-based facial recognition.³⁸³ States may seek to protect personal biological data under privacy laws. Or they may invoke consumer protection powers to mandate disclosure of biometric data practices. Alternatively, they could prohibit specific uses of facial recognition technology deemed discriminatory. Each approach invokes different state interests and legal grounds,

376. See *id.*; see also *Wyeth v. Levine*, 555 U.S. 555, 564–65 (2009) (applying the presumption against preemption); *Medtronic, Inc. v. Lohr*, 518 U.S. 470, 485 (1996) (same).

377. See *Arizona v. United States*, 567 U.S. 387, 400 (2012); *Rice v. Santa Fe Elevator Corp.*, 331 U.S. 218, 230 (1947); see also *Gregory v. Ashcroft*, 501 U.S. 452, 458 (1991) (“[A] healthy balance of power between the States and the Federal Government will reduce the risk of tyranny and abuse from either front.”).

378. See, e.g., *Gregory*, 501 U.S. at 460.

379. Compare *Altria Grp., Inc. v. Good*, 555 U.S. 70, 77 (2008) (explaining that the Court “begin[s] its analysis” with a presumption against preemption “[w]hen addressing questions of *express or implied* preemption” (emphasis added)), with *Puerto Rico v. Franklin Cal. Tax Free Tr.*, 579 U.S. 115, 125 (2016) (explaining that in *express preemption* cases, the Court “do[es] not invoke any presumption against pre-emption but instead focus[es] on the plain wording of the [preemption] clause, which necessarily contains the best evidence of Congress’s pre-emptive intent”).

380. See *Gregory*, 501 U.S. at 469.

381. See S. Candice Hoke, *Preemption Pathologies and Civic Republican Values*, 71 B.U. L. REV. 685, 687–88 (1991) (lamenting the Court’s haphazard approach); Merrill, *supra* note 374, at 741 (remarking that “the presumption against preemption is honored as much in the breach as in observance”). For champions of the anti-preemption presumption and other federalism clear-statement rules that preserve state autonomy, see generally, Young, *supra* note 11; Clark, *supra* note 13, at 1427–28. For critiques, see Viet D. Dinh, *Reassessing the Law of Preemption*, 88 GEO. L.J. 2085, 2096 (2000) (arguing that the “constitutional text, structure, and history does not support the application of the [presumption] in all contexts”); Caleb Nelson, *Preemption*, 86 VA. L. REV. 225, 291, 301 (2000) (noting that it would be improper for courts to apply an “artificial presumption against preemption” to constrain “federal statutory provisions that plainly do manifest an inten[t] to supplant state law”).

382. See discussion *supra* Sections I.A–B.

383. See *Facial Recognition Technology: How It Works, Where It’s Used, and What It Means for Privacy*, GOVFACTS (Aug. 10, 2025, at 19:43 MT) <https://govfacts.org/explainer/facial-recognition-technology-how-it-works-where-its-used-and-what-it-means-for-privacy/> [<https://perma.cc/2D8R-SPTA>]; KASHMIR HILL, *YOUR FACE BELONGS TO US: THE SECRETIVE STARTUP DISMANTLING YOUR PRIVACY* (2024).

yet all regulate facial recognition. To take another example, recall California's proposed SB 1047.³⁸⁴ On the one hand, protecting the safety and well-being of California residents is undeniably a core state function.³⁸⁵ On the other hand, a state's regulation of the most powerful AI models would surely impact national interests.³⁸⁶ Thus, it is far from clear whether or how the presumption against preemption would apply—or should apply—to state laws that regulate the development and deployment of AI models.

Beyond preemption doctrine itself, courts must grapple with how to construe Congress's preemptive intent in federal statutes that predate modern AI systems. The interpretation and application of such statutes will be a critical battleground in shaping the contours of AI federalism. Consider § 230 of the Communications Decency Act.³⁸⁷ Enacted in 1996, § 230's express purpose was to foster internet growth by immunizing online platforms from certain liabilities.³⁸⁸ Its core provision shields online platforms from being “treated as the publisher or speaker” simply for hosting third-party content. Section 230 also generally protects platforms' content moderation decisions.³⁸⁹ To reinforce these immunities, § 230 expressly preempts state laws that are “inconsistent” with these federal protections.³⁹⁰

Courts have generally interpreted § 230 immunity broadly to cover online platforms, irrespective of the theory of liability pursued under state law.³⁹¹ However, the use of AI by platforms has exposed cracks in § 230's shield. Courts are now split on whether algorithmic recommendation and content moderation systems are covered by § 230 immunity or constitute the platform's own “expressive activity.”³⁹² In *Anderson v. TikTok*, for example, the U.S. Court of Appeals for the Third Circuit held that § 230 did not shield TikTok from a state-law liability claim alleging that its algorithm negligently recommended a dangerous video.³⁹³ The court reasoned that the claim targeted TikTok's own conduct in designing and deploying

384. See *supra* notes 302–04 and accompanying text.

385. See, e.g., *Medtronic, Inc. v. Lohr*, 518 U.S. 470, 475 (1996) (discussing the historic police power of states to protect the health and safety of their citizens); *Jacobson v. Massachusetts*, 197 U.S. 11, 25 (1905) (same).

386. See *America's AI Action Plan*, THE WHITE HOUSE 1 (2025), <https://www.whitehouse.gov/wp-content/uploads/2025/07/Americas-AI-Action-Plan.pdf> [<https://perma.cc/AA8R-8EPD>] (linking national security to American AI innovation); Joshua Levine, *The Opportunity Costs of State and Local AI Regulation*, CATO INST. (June 10, 2025), <https://www.cato.org/policy-analysis/opportunity-costs-state-local-ai-regulation> [<https://perma.cc/WE25-QJF7>] (“Failing to consider the variety of applications for underlying technology such as AI could lead to misplaced regulation that restricts innovation and undercuts benefits for society writ large.”).

387. Pub. L. No. 104-104, § 509, 110 Stat. 56, 137–39 (1996).

388. See 47 U.S.C. § 230(c)(1) (2018); *Zeran v. Am. Online, Inc.*, 129 F.3d 327, 330–32 (4th Cir. 1997).

389. 47 U.S.C. § 230(c).

390. *Id.* § 230(e)(3).

391. See, e.g., *Zeran*, 129 F.3d at 329–32.

392. See ERIC N. HOLMES, CONG. RSCH. SERV., R47753, LIABILITY FOR ALGORITHMIC RECOMMENDATIONS 10–11 (2023).

393. 116 F.4th 180, 184 (3d Cir. 2024).

the algorithm, and was not immune from state law.³⁹⁴ However, other circuits have characterized platform algorithms as “neutral tools” entitled to full § 230 immunity.³⁹⁵ The Supreme Court had an opportunity to clarify the application of § 230 to algorithmic recommendations in *Gonzalez v. Google*, but it resolved the case on other grounds.³⁹⁶ Thus, for now, the lingering circuit split means that identical state laws regulating AI-powered content curation might be preempted in some circuits but not others. Even more uncertain are state regulations governing AI-generated content itself, where courts have yet to determine whether platforms using generative AI systems are hosting “information provided by another” or creating their own content, subjecting them to liability.³⁹⁷

Section 230 is just one example of the practical and theoretical challenges of preemption analysis under existing federal statutes. The existence of an express preemption clause may help, like in § 230.³⁹⁸ But as the foregoing discussion hopes to impress, the scope of Congress’s preemptive intent must still be gleaned from those statutes. Furthermore, the preemption analysis varies significantly across different federal regimes: some create express preemption with clear boundaries, others imply preemption through pervasive regulatory schemes, and still others establish federal floors that explicitly preserve more protective state laws.³⁹⁹ Understanding these variations is crucial for predicting which state AI initiatives will withstand constitutional challenge.

b. Administrative Preemption

Agencies can preempt state law through binding regulations or adjudicatory orders.⁴⁰⁰ Like all agency authority, the power of preemption must be

394. *Id.* at 183–85 (rejecting § 230 immunity for TikTok’s recommendation algorithm on the ground that it is first-party speech).

395. *See Force v. Facebook, Inc.*, 934 F.3d 53, 64–71 (2d Cir. 2019) (finding Facebook’s recommendation functions to be neutral tools entitled to § 230 protection); *Dyroff v. Ultimate Software Grp., Inc.*, 934 F.3d 1093, 1094 (9th Cir. 2019); *see also M.P. ex rel. Pinckney v. Meta Platforms Inc.*, 127 F.4th 516, 526 (2025) (holding that Facebook’s algorithmic content sorting constituted traditional editorial publishing functions protected by § 230).

396. 598 U.S. 617, 622 (2023). The *Gonzalez* plaintiffs argued that YouTube’s algorithms, by actively recommending ISIS videos, went beyond passive hosting and constituted conduct not immunized by § 230. The Ninth Circuit had disagreed, finding recommendations were protected. *Gonzalez v. Google LLC*, 2 F.4th 871, 880 (9th Cir. 2021), *vacated*, 598 U.S. 617 (2023).

397. *See* PETER J. BENSON & VALERIE C. BRANNON, CONG. RSCH. SERV., LSB11097 SECTION 230 IMMUNITY AND GENERATIVE ARTIFICIAL INTELLIGENCE 3–5, (2023); Louis Shaheen, *Section 230’s Immunity for Generative Artificial Intelligence*, 15 SEATTLE J. TECH., ENV’T. & INNOVATION. L. 1, 3 (2024).

398. *See* 47 U.S.C. § 230(e)(3) (“No cause of action may be brought and no liability may be imposed under any State or local law that is inconsistent with this section.”); *see also* 17 U.S.C. § 301(a) (preempting state law rights that are “equivalent to any of the exclusive rights within the general scope of copyright”).

399. *See* BRYAN L. ADKINS, ALEXANDER H. PEPPER & JAY B. SYKES, CONG. RSCH. SERV., R45825, FEDERAL PREEMPTION: A LEGAL PRIMER 4 (2023).

400. *See* *Fid. Fed. Sav. & Loan Ass’n v. De la Cuesta*, 458 U.S. 141, 153 (1982) (“Federal regulations have no less pre-emptive effect than federal statutes.”); David S.

expressly or impliedly delegated by Congress.⁴⁰¹ When that authority exists, agencies wield extraordinary power in our federalist system; they can displace the law of all 50 states in contexts where Congress has not.⁴⁰² The prospect of administrative preemption is especially acute when Congress is politically gridlocked because the only viable path to regulatory uniformity may be through the executive branch.⁴⁰³ What's more, unlike in Congress, agencies can preempt state law without the political safeguards that inhere in the legislative process. Thus, administrative preemption warrants close inspection, both doctrinally and strategically.

Start with doctrine. Administrative preemption has hard limits: only valid federal law can preempt state law.⁴⁰⁴ There are two components to this. First, the federal action at issue must be *valid*.⁴⁰⁵ Second, the federal action must be *law*.⁴⁰⁶ Neither should be taken for granted in the AI context. Here, the federalism implications of *Chevron*'s overruling and the MQD come into sharper relief. As previously explained, these doctrinal developments render federal AI regulations judicially vulnerable, and many will likely be invalidated on grounds of executive overreach.⁴⁰⁷ Because only valid federal law can preempt state law, judicial vacatur of agency regulations removes a potential source of federal preemption.

To avoid judicial scrutiny, agencies may opt for nonbinding guidance and other soft-law instruments, such as the NIST risk-management framework.⁴⁰⁸ While these initiatives are valid, they are not "Laws" under the Supremacy Clause.⁴⁰⁹ Thus,

Rubenstein, *Delegating Supremacy?*, 65 VAND. L. REV. 1125, 1137–38, 1147–53 (2010) (comparing and contextualizing the Court's statutory and administrative preemption doctrines).

401. See *La. Pub. Serv. Comm'n v. Fed. Comm'n Comm'n*, 476 U.S. 355, 374 (1986) ("[A] federal agency may pre-empt state law only when and if it is acting within the scope of its congressionally delegated authority."); see also, e.g., 47 U.S.C. §§ 253(a), (d) (authorizing the Federal Communications Commission to preempt "any [state] statute, regulation, or legal requirement" that "may prohibit or have the effect of prohibiting the ability of any entity to provide any interstate or intrastate telecommunications service"); *De la Cuesta*, 458 U.S. at 154 (recognizing that Congress's delegation of preemption authority can be implied).

402. See Rubenstein, *supra* note 400, at 1126. Ernie Young's work has stressed the importance of protecting state autonomy through preemption doctrine more generally. See, e.g., Ernest A. Young, *Executive Preemption*, 102 NW. U. L. REV. 869, 869 (2008) (arguing that administrative preemption poses challenges to federalism theory and practice).

403. Cf. Jody Freeman & David B. Spence, *Old Statutes, New Problems*, 163 U. PA. L. REV. 1, 6 (2014) (arguing that "congressional gridlock has reached levels unseen in the last fifty years").

404. See, e.g., *Gonzales v. Oregon*, 546 U.S. 243, 275 (2006) (holding that an invalid rule issued by the Attorney General could not preempt state law).

405. See *id.* at 255; *Gibbons v. Ogden*, 22 U.S. (9 Wheat.) 1, 7 (1824) (rendering the displacement of state law contingent on the validity of state law).

406. See U.S. CONST. art. VI, cl. 2 (providing that "Laws" made pursuant to the Constitution are the Supreme Law).

407. See *supra* Subsection II.A.3.

408. See NIST AI RMF, *supra* note 26.

409. Soft laws, which are not binding, do not qualify as preemptive "Laws" under the Supremacy Clause. See, e.g., *Arizona v. United States*, 567 U.S. 387, 445 (2012) (Alito,

they cannot preempt state law. The same is generally true for executive orders.⁴¹⁰ They can bind the *federal government*.⁴¹¹ To preempt state law, however, there must be a conflict of law as applied to *private parties*.⁴¹²

The twin principles that federal action must be valid and have the force of law are mutually reinforcing. It requires agencies to choose between enacting binding regulations that may qualify for preemptive effect or issuing a nonbinding policy that cannot. The requirement that only valid federal law can preempt state law prevents agencies from having it both ways.⁴¹³ Otherwise, agency action that is not binding on private parties could bind state sovereigns. That is not how federalism works.⁴¹⁴

The Court's overruling of *Chevron* and its embrace of the MQD intersect with administrative federalism in another key respect. Specifically, agencies may interpret federal statutes to argue that *Congress* preempted state law. For example, the Copyright Office's interpretation of the Copyright Act, which denies a copyright claim for AI-generated content, is not a binding agency regulation but rather a statutory interpretation. That interpretation, *if* judicially upheld, might create a preemptive conflict with the Arkansas 927 Act, which grants intellectual property rights in generative AI outputs under certain conditions.⁴¹⁵ Yet, in this scenario, it would not be an agency *regulation* that displaces state law, but rather the *federal statute* as interpreted and applied to AI-generated content.

J., concurring in part and dissenting in part) (expressing the view that an agency's nonbinding enforcement policies could not preempt since they did not carry the "force of law").

410. See *Medellín v. Texas*, 552 U.S. 491, 532 (2008).

411. Even then, the obligations are not legally enforceable by private parties. Thus, for example, if an agency disregards a directive contained in an executive order, the President can decide what to do about it, but courts cannot. Most executive orders, including Biden's Executive Order 14,110, contain boilerplate language to this effect: "This order is not intended to, and does not, create any right or benefit, substantive or procedural, enforceable at law or in equity by any party against the United States . . ." See Exec. Order No. 14,110, *supra* note 16, § 13(c).

412. None of the AI executive orders issued by President Trump or President Biden fit the bill. See *supra* note 163 and accompanying text (discussing executive orders pertaining to AI); cf. *Murphy v. Nat'l Collegiate Athletic Ass'n*, 584 U.S. 453, 477–79 (2018) ("Every form of preemption is based on a federal law that regulates the conduct of private actors . . .").

413. See David S. Rubenstein, *The Paradox of Administrative Preemption*, 38 HARV. J.L. & PUB. POL'Y 268, 268 (2014) (positing that administrative preemption is a paradox under the Court's formalist conceptions of separation of powers and federalism).

414. See *id.* at 268–69.

415. See *Loper Bright Enters. v. Raimondo*, 603 U.S. 369, 412 (2024) (requiring *de novo* review under the APA for issues of statutory interpretation); see also CHRISTOPHER T. ZIRPOLI, CONG. RSCH. SERV., LSB10922, GENERATIVE ARTIFICIAL INTELLIGENCE AND COPYRIGHT LAW 3 (2025) ("While the Copyright Office notes that courts sometimes give weight to the office's experience and expertise, courts are not legally bound to adopt the office's interpretations of the Copyright Act . . .").

Until recently, courts and commentators struggled to square the anti-preemption canon and *Chevron* deference in such situations.⁴¹⁶ When both doctrines applied, the presumption against preemption favored upholding state law, whereas *Chevron* deference favored the agency's interpretations of ambiguous federal statutes—including preemptive interpretations.⁴¹⁷ By overruling *Chevron*, the Court indirectly resolved this tension.⁴¹⁸ Now, rather than defer, courts should apply de novo review (and possibly heightened MQD scrutiny) to agency interpretations of federal statutes that would preempt state law.⁴¹⁹

The cross-structural dynamics of administrative law and federalism have yet to be priced into AI's political economy. But once appreciated, they may prompt a shift in strategic advocacy. To illustrate, consider a hypothetical agency regulation requiring high-risk AI system deployers to engage in safety testing. Further assume that industry stakeholders seek a judicial injunction, arguing that the agency exceeded its statutory authority. If the challenge succeeds, the industry plaintiffs will have scored a partial win: to wit, they will avoid compliance obligations under the null regulation. However, they may yet be obligated under state law in ways that are more costly or more constraining. Had the agency regulation survived, or if no challenge had been raised, the federal law might have preempted contrary state law. But the absence of federal law cannot. Moreover, once it is judicially established that the agency is not statutorily authorized to enact the regulation at issue, that holding will effectively prevent the agency from issuing a materially equivalent preemptive regulation unless and until Congress expressly delegates that authority.

The tradeoffs might be clear to the relevant stakeholders. For instance, the agency and industry trade groups may prefer binding agency regulations that preempt state law. Or they may prefer nonbinding agency regulations, which cannot preempt state law. But they cannot have it both ways. The tradeoff must first be appreciated, and too often it is not.

2. Dormant Commerce Clause

As AI technologies become more pervasive and increasingly impact interstate commerce, the Dormant Commerce Clause (“DCC”) could play a

416. See, e.g., Young, *supra* note 402, at 885–88 (analyzing the doctrinal tension); Nina A. Mendelson, *Chevron and Preemption*, 102 MICH. L. REV. 737, 742–47 (2004) (same); Paul E. McGreal, *Some Rice With Your Chevron?: Presumption and Deference in Regulatory Preemption*, 45 CASE W. RES. L. REV. 823, 826 (1995) (same).

417. See Mendelson, *supra* note 416, at 742–47 (tracing lower-court inconsistency when agencies invoke *Chevron* to support preemption); McGreal, *supra* note 416, at 826 (complaining that “the Court merely has applied statutory preemption rules to regulatory preemption cases” without reflecting on the differences between Congress and agencies); *Smiley v. Citibank (S.D.)*, N. A., 517 U.S. 735, 739 (1996).

418. *Loper Bright*, 603 U.S. at 411–12 (overruling *Chevron* and confirming that courts generally must exercise independent judgment when interpreting statutes). Although *Loper Bright* did not involve preemption issues, there is nothing in the case to suggest that courts would grant *Chevron*-style deference to agency interpretation of statutes that would displace state laws.

419. See Kamaile A.N. Turčan, “Major Questions” About Preemption, 69 VILL. L. REV. 737, 750–55 (2024) (arguing that after *Loper Bright*, courts should treat agency claims of preemptive authority as “major questions” requiring a clear statement from Congress).

significant role in shaping AI federalism by default. Generally, state law not preempted under the Supremacy Clause may nevertheless run afoul of the DCC in two main ways.⁴²⁰ First, state regulations may not discriminate against interstate commerce.⁴²¹ This prohibition generally prevents states from engaging in “economic protectionism” designed to “benefit in-state economic interests by burdening out-of-state competitors.”⁴²² Applying this rule, the Court has struck down state regulations that treat out-of-state or interstate interests less favorably.⁴²³ Second, states may not unduly burden interstate commerce.⁴²⁴ When the burden is “clearly excessive in relation to the putative local benefits,” state law will be negated.⁴²⁵

Like preemption analysis, DCC challenges cannot be answered in the abstract. But a few key points can quickly be disposed of. To begin, it is well settled that states have legitimate sovereign interests to promote the health, safety, and well-being of their residents.⁴²⁶ AI technologies implicate *all* these sovereign interests. In addition, state AI regulations will invariably affect interstate commerce due to the technology’s market integration, sprawling supply chains, information networks, and data dependencies. From this starting position, the issues discussed below are whether the Constitution prohibits states from enacting AI regulations with extraterritorial reach or that unduly burden or discriminate against interstate commerce.

a. Extraterritoriality

Until recently, there was great uncertainty about whether the extraterritorial effects of state law alone could establish a DCC violation.⁴²⁷ However, in 2023, the Supreme Court flatly rejected a “per se extraterritoriality rule.”⁴²⁸ The California statute at issue in *National Pork Producers Council v. Ross* forbids the in-state sale of pork meat from pigs bred “in a cruel manner.”⁴²⁹ The industry trade group that

420. U.S. CONST. art. I, § 8, cl. 3; *Nat’l Pork Producers Council v. Ross*, 598 U.S. 356, 370–71 (2023) (plurality opinion).

421. *See* *Tenn. Wine & Spirits Retailers Ass’n v. Thomas*, 588 U.S. 504, 518 (2019).

422. *See* *Dep’t of Revenue of Ky. v. Davis*, 553 U.S. 328, 337–38 (2008).

423. *See* *Hughes v. Oklahoma*, 441 U.S. 322, 337–38 (1979); *Dean Milk Co. v. Madison*, 340 U.S. 349, 356 (1951).

424. *See* *South Dakota v. Wayfair, Inc.*, 585 U.S. 162, 178 (2018).

425. *See* *Pike v. Bruce Church*, 397 U.S. 137, 142–43 (1970) (showing that when applying this test, courts consider whether the state’s legitimate interests could be promoted with a “lesser impact on interstate activities.”); *see also* *Nat’l Pork*, 598 U.S. at 390–91 (discussing the test).

426. *See, e.g., Pike*, 397 U.S. at 143.

427. *See* *Nat’l Pork*, 598 U.S. at 371–80 (discussing its precedents and lower court treatments); *see generally* Mark D. Rosen, *State Extraterritorial Powers Reconsidered*, 85 NOTRE DAME L. REV. 1133 (2010) (critically assessing the Court’s extraterritoriality jurisprudence); Jack L. Goldsmith & Alan O. Sykes, *The Internet and the Dormant Commerce Clause*, 110 YALE L.J. 785, 804 (2001) (same).

428. *Nat’l Pork*, 589 U.S. at 375.

429. CAL. HEALTH & SAFETY CODE § 25990(b)(2). Under the law, confinement is “cruel” if it prevents a pig from “lying down, standing up, fully extending [its] limbs, or turning around freely.” *Id.* § 25991(e)(1).

brought the case repeatedly failed to persuade Congress to enact a uniform rule for pork production.⁴³⁰ Having lost the political fight, they sought judicial redress under the DCC, arguing that out-of-state firms would bear the full brunt of the law.⁴³¹ This is typical in DCC cases. Stakeholders that cannot convince Congress to preempt state law argue, in court, that the Constitution itself renders state law invalid.⁴³² None of this is lost on the Court. Indeed, in *National Pork*, Justice Gorsuch cited these dynamics as an admonishment for courts to exercise “[e]xtreme caution” before striking down “democratically adopted state law” under the DCC.⁴³³

Exercising that very caution, the Court rejected the trade association’s argument that the extraterritorial effects alone could violate the DCC.⁴³⁴ According to the Court, a per se extraterritoriality rule would be impossible to maintain without forfeiting federalism’s core values, such as state autonomy, policy experimentation, and the checking functions enabled by decentralized governance.⁴³⁵ Furthermore, the Court explained that judicial line-drawing between permissible and impermissible extraterritorial effects would “invite endless litigation and inconsistent results.”⁴³⁶

The Court’s holding and reasoning in *National Pork* eliminate what would otherwise have been a formidable constraint on state AI regulation. Consider, for example, Colorado’s comprehensive AI Act.⁴³⁷ It imposes a duty of reasonable care to prevent “algorithmic discrimination” against Colorado residents, and it applies to developers and deployers doing business in the state.⁴³⁸ This will undoubtedly have extraterritorial effects. However, like the pork producers who could not escape California’s requirements, AI companies cannot avoid Colorado’s law if they wish to operate in the state’s market. After *National Pork*, the extraterritorial effect is a predictable by-product of state autonomy in a national economy, not a constitutional defect.

b. Excessive Burden Test

While the Court in *National Pork* firmly rejected extraterritoriality as a per se ground for striking down state regulation, the Court fractured over the continued

430. *Nat’l Pork*, 589 U.S. at 368 (citing H.R. 272, 116th Cong., 1st Sess., § 2 (2019); H.R. 4879, 115th Cong., 2d Sess., § 2(a) (2018); H.R. 3599, 115th Cong., 1st Sess., § 2(a) (2017); H.R. 687, 114th Cong., 1st Sess., § 2(a) (2015)).

431. *See Nat’l Pork*, 598 U.S. at 368 (noting that petitioners were “pinning their hopes” on the DCC after Congress failed to act).

432. *See, e.g., S. Pac. Co. v. Arizona ex rel. Sullivan*, 325 U.S. 761, 766 (1945) (“Congress, although asked to do so, has declined to pass legislation specifically limiting trains to seventy cars,” which led to litigation to strike state laws under the DCC.).

433. *Nat’l Pork*, 598 U.S. at 390.

434. *Id.*

435. *Id.* at 1163.

436. *See id.* at 1156.

437. COLO. REV. STAT. §§ 6-1-1701 to -1707 (2024).

438. *Id.* §§ 6-1-1702 to -1703 (imposing a duty of reasonable care on developers and deployers of high-risk AI systems to protect consumers from algorithmic discrimination); *see also id.* § 6-1-1701(6) (defining a deployer as a person “doing business in this state”).

validity of the excessive burden test.⁴³⁹ Writing for a plurality, Justice Gorsuch expressed longstanding concerns about this strand of DCC doctrine.⁴⁴⁰ The formal objection is anchored to broader concerns about the DCC's tenuous constitutional foundations.⁴⁴¹ Arguably, neither the constitutional structure nor the history of the Commerce Clause justifies its invocation to strike down state laws in contexts where Congress could do so but has not.⁴⁴²

Beyond this formal concern, Gorsuch's opinion harped on the judicial unmanageability of the undue burden test.⁴⁴³ There is no "neutral legal rule" or "juridical principle" by which reviewing courts can legitimately and reliably balance local benefits against interstate burdens.⁴⁴⁴ When tradeoffs among competing values are necessary, courts are not the institutions that should decide.⁴⁴⁵ Instead, "policy choices like these usually belong to the people and their elected representatives . . . [who] are entitled to weigh the relevant 'political and economic' costs and benefits for themselves and 'try novel social and economic experiments' if they wish."⁴⁴⁶ Moreover, the petitioners' assertion that California's law would "massive[ly]" disrupt the national pork industry did not sway the Court.⁴⁴⁷ Even if true, Gorsuch explained, Congress is not only "better equipped" to assess "all the pertinent economic and political interests at play," but also "better positioned to claim democratic support for any policy choice it may make."⁴⁴⁸

Despite these concerns, the Court did not overrule the excessive burden test.⁴⁴⁹ Still, the test will likely be sparingly applied going forward.⁴⁵⁰ The unsettled nature of this doctrinal strand leaves state efforts to regulate AI in uncertain territory. On the one hand, doctrinal indeterminacy and instability may chill state regulatory

439. See *Nat'l Pork*, 598 U.S. at 403 (Kavanaugh, J., concurring in part and dissenting in part). Justice Gorsuch's opinion would "essentially overrule the *Pike* balancing test," but those portions of the opinion are not "controlling precedent" due to a plurality. *Id.*; see also *id.* at 391 (Sotomayor, J., concurring); *id.* at 393 (Barrett, J., concurring in part). Chief Justice Roberts, dissenting, found that petitioners had "plausibly alleged a substantial burden against interstate commerce." *Id.* at 395.

440. See *id.* at 380–81 (plurality opinion).

441. See *id.* at 380.

442. But cf. Barry Friedman & Daniel T. Deacon, *A Course Unbroken: The Constitutional Legitimacy of the Dormant Commerce Clause*, 97 VA. L. REV. 1877, 1927 (2011) (squaring the *Pike* balancing test with the constitutional structure and as congruent with the DCC's anti-discrimination principle); RICHARD H. FALLON, JR., *THE DYNAMIC CONSTITUTION* 311 (2d ed. 2013) (observing that *Pike* serves to "'smoke out' a hidden" protectionism).

443. See *Nat'l Pork*, 598 U.S. at 382.

444. *Id.*

445. *Id.* at 383.

446. *Id.* (first quoting *New State Ice Co. v. Liebmann*, 285 U.S. 262, 311 (1932) (Brandeis, J., dissenting); and then quoting *Moorman Mfg. Co. v. Bair*, 437 U.S. 267, 279 (1978)).

447. *Id.*

448. *Id.*

449. Instead, a majority held that petitioners had failed to meet it. See *id.* at 391 (Sotomayor, J., concurring) ("[P]etitioners fail to allege a substantial burden on interstate commerce as required by *Pike*, not because of any fundamental reworking of that doctrine.").

450. See *id.*

innovations that would, if enacted, pass constitutional muster. On the other hand, the Court's mixed signals in *National Pork* might encourage states to regulate AI in ways that will challenge courts to balance the burdens on interstate commerce against a state's legitimate interest.

Applying the excessive burdens test will be especially challenging in AI contexts for all the same reasons raised in *National Pork* and more. Some state AI regulations may be economically motivated; others may be morally or socially grounded. But many state laws will strike all these notes in one chord.⁴⁵¹ What's more, judges must make these calculations in countless regulatory contexts. Again, the issue is not whether regulatory uniformity is beneficial for interstate commerce or preferred by firms operating in the national market. We can assume the answers are yes and be no closer to answering the DCC's core provocation: whether Congress's dormant power to regulate AI prevents states from doing so. The managerial problem of centralization and decentralization is complex and policy-laden. Judges can do it, but not well. If it is to be done at all, then it arguably should be done by Congress.

c. Antidiscrimination Test

State regulations that discriminate against interstate commerce by favoring in-state interests generally violate the DCC, subject to narrow exceptions.⁴⁵² In *National Pork*, the Court stressed the centrality and long pedigree of the antidiscrimination principle.⁴⁵³ While not always easy to apply, this test is more doctrinally manageable than the excessive burden test because it does not require courts to weigh incommensurate interests. Moreover, discriminatory state laws are often easy to identify based on the statutory text itself.⁴⁵⁴ Another saving grace of the antidiscrimination test is its relative predictability, enabling state legislators to draft their laws accordingly.⁴⁵⁵

In the AI context, for instance, a state law that imposes regulations solely on out-of-state AI developers would almost certainly violate the antidiscrimination test. However, a state law that imposes the regulations evenhandedly on all AI developers would not violate this test.⁴⁵⁶ Anticipating this, the legislature might forgo regulating AI developers altogether or impose nondiscriminatory

451. See, e.g., S.B. 1047, 2023–2024 Leg., Reg. Sess. § 2(c) (Cal. 2024) (vetoed) (framing AI safety regulation as necessary to avoid “novel threats to public safety and security, including . . . weapons of mass destruction”); N.Y.C. ADMIN. CODE § 20-870 (justifying regulation of AI hiring tools based on concerns about discriminatory impact on protected groups).

452. See, e.g., *Dep't of Revenue of Ky. v. Davis*, 553 U.S. 328, 338 (2008) (noting a “virtually per se” rule of invalidity against laws that facially discriminate against interstate commerce).

453. See *Nat'l Pork*, 598 U.S. at 375–77; see also *Camps Newfound/Owatonna, Inc. v. Town of Harrison*, 520 U.S. 564, 573–76 (1997) (expressing concerns about extraterritorial reach of the state law at issue).

454. *Nat'l Pork*, 598 U.S. at 377.

455. *Id.* at 377–78.

456. *Id.* at 375 (stating that California law does not implicate the antidiscrimination principle because it applies evenhandedly to all pork producers that sell in the California market).

requirements. Both would be permissible. If a legislature takes either path, then the doctrine will have indirectly shaped AI policy through political deterrence.⁴⁵⁷

* * *

AI federalism by default is not inevitable; it is just the most probable based on current sociopolitical conditions. Those who prefer a more coordinated AI regulatory landscape can work toward designing it. The next Section contemplates a range of possibilities, with a focus on cooperative federalism arrangements.

B. AI Federalism by Design

When federalism is by design, Congress and the Executive have many tools at their disposal to align national and local interests. This Section sketches some ways, but the specifics are not what matter most here. Instead, the focus is on the structural tools: express preemption, federal spending, and cooperative federalism arrangements.

1. Express Preemption

Congress regularly tolerates—and often prefers—state-based policy innovation and experimentation. This seems no less true in the AI realm. The bipartisan House AI Task Force report, published in late 2024, was expressly noncommittal on whether Congress should preempt state law.⁴⁵⁸ Moreover, there were no preemption provisions in the dozens of bipartisan AI bills introduced in the 118th Congress.⁴⁵⁹ However, the tide is shifting in the Republican-controlled 119th Congress. As earlier discussed, the One Big Beautiful Bill Act contained a preemption provision that, in its original form, included a ten-year moratorium on state regulation of AI.⁴⁶⁰ Alongside political resistance, the AI preemption was constitutionally dubious.⁴⁶¹ Because a similar provision is likely to reemerge in some form, it is worth articulating the constitutional objections here.

457. *Cf. id.* at 392 (Sotomayor, J., concurring) (“Warding off state discrimination against interstate commerce is at the heart of our dormant Commerce Clause jurisprudence.”).

458. *See* HOUSE AI REPORT, *supra* note 96, at 29.

459. *See Artificial Intelligence Legislation Tracker*, BRENNAN CTR. FOR JUST., <https://www.brennancenter.org/our-work/research-reports/artificial-intelligence-legislation-tracker> [<https://perma.cc/W9N8-NLJ6>] (last visited Sep. 18, 2025) (cataloging over 120 AI-related bills introduced in the 118th Congress); *see also* Adam Thierer, *The House AI Task Force Report: Positive Steps, but One Big Problem*, MEDIUM (Dec. 18, 2024), <https://medium.com/@AdamThierer/the-house-ai-task-force-report-positive-steps-but-one-big-problem-65b023454799> [<https://perma.cc/Q36N-3YAF>] (lamenting that “of the 100+ AI bills that were floated in Congress this session, I did not read a single one that had anything to say about state preemption”).

460. H.R. 1, 119th Cong. § 43201(c)(1) (as passed by House, May 22, 2025) (moratorium clause).

461. *See* David S. Rubenstein, *AI Governance Needs Federalism, Not a Federally Imposed Moratorium*, JUST SEC. (May 29, 2025), <https://www.justsecurity.org/113728/ai-governance-federalism-moratorium/> [<https://perma.cc/T933-L9AT>] (arguing the moratorium provision likely constitutes unconstitutional commandeering under the Tenth Amendment).

Congress clearly has the power to regulate AI under the Commerce Clause.⁴⁶² “But for Congress to say, in effect, ‘we choose not to regulate, and we won’t let states either,’ is an unusual—and likely unconstitutional—assertion of national power.”⁴⁶³ While Congress can regulate *private* actors in ways that preempt contrary state laws,⁴⁶⁴ Congress cannot directly regulate *state* institutions.⁴⁶⁵ The Tenth Amendment forbids it.⁴⁶⁶ The Supreme Court’s 2018 decision in *Murphy v. NCAA* reinforced these principles.⁴⁶⁷ The federal statute at issue—PASPA—prohibited states from legalizing sports gambling, which the Court held was an unconstitutional commandeering.⁴⁶⁸ PASPA’s fatal flaw was the absence of any regulation of private action.⁴⁶⁹ It neither conferred federal rights on individuals or entities desiring to conduct sports gambling operations nor imposed any federal restrictions on private actors. Thus, there was “no way to understand the provision prohibiting state authorization as anything other than a direct command to the States,” which was unconstitutional.⁴⁷⁰

Murphy distinguished commandeering from permissible “deregulatory preemption.”⁴⁷¹ The distinction can sometimes prove difficult. However, the AI preemption moratorium was almost certainly an impermissible commandeering.⁴⁷² The proposal’s text did not even purport to regulate private AI development, deployment, or use. Nor is there any other federal framework that governs AI in private markets.

To comply with the Tenth Amendment, Congress must affirmatively regulate private action, which can take the form of an explicit right to engage in certain activity.⁴⁷³ Even then, the federal right must be more than an incidental

462. See U.S. CONST. art. I, § 8, cl. 3 (vesting Congress the power “to regulate Commerce with foreign Nations” and “among the several States”).

463. Rubenstein, *supra* note 461.

464. See *Murphy v. Nat’l Collegiate Athletic Ass’n*, 584 U.S. 453, 479–80 (2018); see also *Gibbons v. Ogden*, 22 U.S. (9 Wheat.) 1, 210–11 (1824) (establishing that federal laws made in pursuance of the Constitution are supreme and supersede contrary state laws).

465. See *New York v. United States*, 505 U.S. 144, 166 (1992).

466. *Id.*; *Printz v. United States*, 521 U.S. 898, 933 (1997) (“The Federal Government may not compel the States to enact or administer a federal regulatory program.”).

467. 584 U.S. 453 (2018).

468. *Id.* at 474.

469. *Id.* at 477, 479–480.

470. *Id.* at 480.

471. The Court cited the Airline Deregulation Act as an example of permissible deregulatory preemption. The Act prohibited states from enacting or enforcing laws “relating to rates, routes, or services of any [covered] air carrier.” *Id.* at 478. Crucially, this prohibition operated within a comprehensive federal scheme governing the airline industry. In that context, the Court interpreted the Act to confer a limited “federal right” for airline carriers to set rates, routes, and services without state interference. *Id.* at 478–79 (“[I]f we look beyond the phrasing employed in the Airline Deregulation Act’s preemption provision, it is clear that this provision . . . confers on private entities (i.e., covered carriers) a federal right to engage in certain conduct subject only to certain (federal) constraints.”).

472. See H.R. 1, 119th Cong. § 43201(c)(1) (as passed by House, May 22, 2025) (moratorium clause).

473. See *Murphy*, 584 U.S. at 473–74, 478–80.

consequence of a prohibition on state action.⁴⁷⁴ Otherwise, the distinction between preemption and commandeering would collapse. The anticommandeering doctrine establishes a categorical bar, not a balancing test.⁴⁷⁵ Thus, significant national interests cannot override this constitutional principle.⁴⁷⁶ Even mild intrusions on state sovereignty violate constitutional limits.⁴⁷⁷

Beyond constitutional concerns, prohibiting state legislatures from addressing AI-related challenges for a decade would undermine the principles of federalism precisely at a time when government oversight is most needed. Rather than targeting specific activities in particular sectors, the moratorium attaches to AI technology itself across all applications and social contexts.⁴⁷⁸ This intrusion into traditional state police powers is unprecedented. It would eliminate states' ability to protect citizens in areas including consumer protection, public health and safety, civil rights, education, law enforcement, labor, employment, etc.⁴⁷⁹ Although the moratorium was pitched as a "learning period,"⁴⁸⁰ it is highly questionable whether Congress, after years of inaction at the state level, would suddenly possess the wisdom to craft practical and effective AI rules. Instead, Congress may learn best by allowing states leeway to see which policies work, which ones fail, which require refinement, and why.

Achieving congressional consensus on AI regulation will prove difficult. And that's partly the point. Under the anticommandeering doctrine, Congress may not compensate for its inability to regulate AI by silencing states that can. What Congress may do, instead, is align states with national goals through cooperative federalism arrangements.⁴⁸¹

474. See *id.* at 478–80.

475. See *id.*; see also *id.* at 486 (“The legalization of sports gambling requires an important policy choice, but the choice is not ours to make.”).

476. See *id.* at 472 (“Where a federal interest is sufficiently strong to cause Congress to legislate, it must do so directly; it may not conscript state governments as its agents.”).

477. See *Printz v. United States*, 521 U.S. 898, 932 (1997) (“It is the very *principle* of separate state sovereignty that such a law offends, and no comparative assessment of the various interests can overcome that fundamental defect.”).

478. See H.R. 1, 119th Cong. § 43201(c)(1) (as passed by House, May 22, 2025) (“[N]o State or political subdivision thereof may enforce any law or regulation regulating artificial intelligence models, artificial intelligence systems, or automated decision systems . . .”).

479. *Id.* The moratorium might even prevent states from applying generally applicable laws like negligence and consumer fraud when AI systems cause harm. *Id.*

480. Thierer, *supra* note 326 (urging Congress to declare a temporary “learning period” free of new AI rules at all levels of government, federal and state alike); Frazier & Thierer, *supra* note 326 (supporting a federal “learning period” moratorium” that would pause new AI regulatory enactments for a period of time.”).

481. See Roderick M. Hills, Jr., *Against Preemption: How Federalism Can Improve the National Legislative Process*, 82 N.Y.U. L. REV. 1, 17–19, 55–58 (2007) (contending that the anticommandeering doctrine promotes the states' bargaining power vis-à-vis the federal government); see also *infra* Subsection III.B.2 (discussing potential cooperative federalism arrangements for AI policy).

2. Cooperative Federalism

Cooperative federalism describes a system of governance in which national, state, and local governments partner to solve common problems within a federally prescribed framework.⁴⁸² The Constitution limits these arrangements but mainly at the margins. As discussed above, the anticommandeering doctrine forbids Congress from requiring states to implement national policies.⁴⁸³ Instead, Congress must entice states to do so.⁴⁸⁴ To that end, Congress generally relies on its power of preemption and its spending power.⁴⁸⁵

Rather than categorically preempt state law, Congress can do so conditionally.⁴⁸⁶ Under that approach, a state's law is preempted unless it opts into the cooperative federalism program.⁴⁸⁷ To do so, Congress generally requires participating states to abide by the federal standards or seek a waiver.⁴⁸⁸ Conditional preemption respects state sovereignty by giving states a choice to implement the federal program or leave it to the federal government.⁴⁸⁹ However, it also ensures that federal standards will be met, one way or another.⁴⁹⁰

Congress often sweetens the deal by offering states federal money to offset the costs of implementing federal standards.⁴⁹¹ Often, the funds come with strings attached to align federal objectives with local implementation.⁴⁹² To be constitutional, the conditions must be clear so that states can plan their affairs and

482. See Philip J. Weiser, *Towards a Constitutional Architecture for Cooperative Federalism*, 79 N.C. L. REV. 663, 665 (2001) (discussing cooperative federalism); see also MORTON GRODZINS, *THE AMERICAN SYSTEM* 8 (Daniel Elazar ed., 1966) (famously describing a shift from “layer cake” federalism, to “marble cake” federalism, under which federal and state authorities share a mixture of responsibilities).

483. See *Murphy v. Nat'l Collegiate Athletic Ass'n*, 584 U.S. 453, 474 (2018); *Printz v. United States*, 521 U.S. 898, 933 (1997) (“The Federal Government may not compel the States to enact or administer a federal regulatory program.”).

484. See *Hills*, *supra* note 481, at 17–19.

485. See *Tyler & Gerken*, *supra* note 140, at 2213 (conceiving of conditional spending and conditional preemption as carrots and sticks to incentive state participation in cooperative federalism programs); see also Lynn A. Baker, *Conditional Federal Spending After Lopez*, 95 COLUM. L. REV. 1911, 1935–54 (1995) (exploring how and why national authorities have so much leverage over the states through conditional spending).

486. See *New York v. United States*, 505 U.S. 144, 167–69 (1992).

487. See generally R. Seth Davis, *Conditional Preemption, Commandeering, and the Values of Cooperative Federalism: An Analysis of Section 216 of EPAct*, 108 COLUM. L. REV. 404 (2008) (examining how conditional preemption operates within cooperative federalism).

488. See *id.* at 440–50.

489. See *id.* at 405.

490. See *id.* at 413.

491. See, e.g., *Nat'l Fed'n of Indep. Bus. v. Sebelius*, 567 U.S. 519, 577–78 (2012); *South Dakota v. Dole*, 483 U.S. 203, 207 (1987) (“The spending power is of course not unlimited, but is instead subject to several general restrictions articulated in our cases.” (citation omitted)); see generally Samuel R. Bagenstos, *Spending Clause Litigation in the Roberts Court*, 58 DUKE L.J. 345 (2008) (discussing the use of conditional spending as a tool for federal influence over state policies).

492. Bagenstos, *supra* note 491, at 379.

make an informed decision about whether to opt in.⁴⁹³ Moreover, the spending conditions must be “germane” to the “federal interest in the particular projects or programs.”⁴⁹⁴ Finally, in keeping with the anticommandeering doctrine, the conditions cannot be coercive.⁴⁹⁵ These limitations, at least in theory, enable states to negotiate for favorable (or at least acceptable) terms before agreeing to implement federally prescribed policies.⁴⁹⁶

3. Cooperative AI Regulation

AI regulation will undoubtedly be an area of cooperative federalism; it is just a matter of when and to what ends. The same political forces conspiring to thwart major national AI regulation will also influence the design of cooperative federalism programs. Thus, a large-scale cooperative AI federalism framework is unlikely anytime soon. However, smaller and more targeted programs are politically feasible and well within reach. In any event, there is value in contemplating such partnerships now because they offer an alternative vision to the status quo. The discussion below provides some illustrations to showcase the range of possibilities, including some low-hanging fruit. Perhaps it will inspire specific approaches, but any full-throated prescription would require further treatment, which space does not permit here.

a. Congressional Design

To start, Congress may affirmatively grant both state and federal actors the authority to enforce a federal statute.⁴⁹⁷ Dual enforcement authority can promote national and state interests simultaneously, and the values of federalism more generally. For example, state attorneys general may use their investigatory powers to uncover and prosecute violations of federal law.⁴⁹⁸ This would allow states to promote and protect local concerns, while also cushioning the demand on federal resources.⁴⁹⁹ Moreover, the enforcement redundancy creates built-in checks against

493. See *Dole*, 483 U.S. at 207–08.

494. *Id.* at 205–08 (quoting *Massachusetts v. United States*, 435 U.S. 444, 461 (1978)).

495. See *Sebelius*, 567 U.S. at 577–78; see also Bagenstos, *supra* note 491, at 372–73 (analyzing the Court’s constraint on Congress’s spending power).

496. See Hills, *supra* note 481, at 17–19, 55–56.

497. See Margaret H. Lemos, *State Enforcement of Federal Law*, 86 N.Y.U. L. REV. 698, 707–10 (2011).

498. In many areas of law, state attorneys general may bring civil causes of action to enforce a variety of federal consumer protection and environmental laws. See, e.g., 15 U.S.C. § 1264(d) (hazardous substances); *id.* § 2073(b)(1) (consumer products); 33 U.S.C. § 1365 (Clean Water Act); 42 U.S.C. § 7604 (Clean Air Act); see also 8 U.S.C. § 1357(g) (2006) (permitting deputized state officers to perform functions of immigration officers related to “investigation, apprehension, or detention of aliens in the United States”); 12 U.S.C. § 5552 (authorizing states to enforce regulations promulgated by the Consumer Financial Protection Bureau under certain circumstances).

499. See Lemos, *supra* note 497, at 713–14 (discussing these intergovernmental benefits); see also John P. Dwyer, *The Practice of Federalism Under the Clean Air Act*, 54 Md. L. REV. 1183, 1224 (1995) (“[T]he federal government cannot implement its air pollution program without the substantial resources, expertise, information, and political support of state and local officials.”).

regulatory capture: if one level of government fails to enforce the law, the other still might.⁵⁰⁰

In the short run, the prospect of dual enforcement authority for AI regulation has potential, especially in contexts where federal and state authority already operate in parallel. For instance, both federal and state jurisdictions regulate consumer protection laws in finance, healthcare, and online commerce.⁵⁰¹ But rather than states enforcing their own laws, Congress can authorize and subsidize state enforcement of federal law.

In addition, Congress can leverage cooperative federalism to promote certain types or areas of regulatory experimentation. For various reasons, states often fail to conduct experiments at levels or in ways that serve national interests.⁵⁰² To combat this, Congress can incentivize specific policy experiments.⁵⁰³ Congress can, for instance, fund AI safety testing at state or local levels. More broadly, Congress can subsidize innovative governance structures. As just one example, Congress could establish a nationally coordinated “AI sandboxes” program. Currently, states are establishing their own AI sandboxes, but not in a coordinated manner.⁵⁰⁴ While there is experimental value in having different state approaches, a national AI sandbox program might capitalize on efficiencies of scale and pollinate learning across jurisdictions.⁵⁰⁵ That way, the lessons of successful and unsuccessful experiments in one state can inform future efforts, both in other states and at the national level.

Moreover, Congress could require participating states to adopt or adapt federally prescribed standards. For example, as a funding condition, states may be required to formally adopt the NIST’s AI risk-management framework.⁵⁰⁶ Alternatively (or additionally), Congress could explicitly prohibit state spending of federal funds for certain AI technologies or applications. For instance, the federal

500. See Lemos, *supra* note 497, at 708; see also, e.g., 12 U.S.C. § 5552(c) (authorizing the Consumer Financial Protection Bureau to intervene in an enforcement action brought by a state attorney general to enforce federal consumer financial law).

501. See, e.g., Federal Trade Commission Act, 15 U.S.C. §§ 41–58 (establishing federal authority to prohibit unfair or deceptive acts or practices in commerce); CAL. BUS. & PROF. CODE §§ 17200–17210 (establishing California’s Unfair Competition Law).

502. Scholars and courts have offered various reasons why policy experiments might not emerge organically. See, e.g., Yair Listokin, *Learning Through Policy Variation*, 118 YALE L.J. 480, 552 (2008) (arguing that federalism does not produce optimal levels of experimentation); Abbe R. Gluck, *Intrastatutory Federalism and Statutory Interpretation*, 121 YALE L.J. 534, 567 (2011) (arguing that federal law is often the “driving force behind state experimentation”).

503. See Bulman-Pozen & Gerken, *supra* note 13, at 1268.

504. See *supra* notes 255–57 and accompanying text.

505. See Hills, *supra* note 481, at 17–19, 55–58 (contending that the anticommandeering doctrine promotes the states’ bargaining power vis-à-vis the federal government).

506. Incorporating the AI RMF as a requirement for *federal* procurement has been proposed in legislation. See S. 3205, 118th Cong. (as introduced in Senate, Nov. 11, 2023) (directing federal agencies to use NIST’s AI RMF in their internal AI risk management efforts). However, I am aware of no similar proposals for integrating the framework into a cooperative program with the states.

government could prohibit local law enforcement agencies from using federal funds to procure drones equipped with facial recognition technology. Or Congress may allow such spending only if certain federally prescribed conditions are met.

Much of the foregoing might be achieved through Congress's power of the purse alone. As noted earlier, however, Congress can pair conditional spending with conditional preemption to incentivize state participation.⁵⁰⁷ For example, Congress can set maximum requirements and allow participating states to pursue less stringent regulations. This preemption structure might be politically desirable for certain sectors or AI applications where overregulation could significantly hamper national interests. Alternatively, Congress may set a regulatory floor while allowing states to adopt nonconflicting or more stringent regulations. Here again, it bears repeating: whether or how to preempt state law is foremost a political choice. Doing so via a cooperative federalism scheme is no exception.

b. Executive Design

While Congress remains the primary architect of cooperative federalism programs, the executive branch has its own set of tools for enlisting state cooperation.⁵⁰⁸ Like Congress, the Executive's ability to promote its agenda through the states is constitutionally constrained. Thus, the Executive cannot commandeer or otherwise coerce states to act.⁵⁰⁹ Moreover, executive power to enlist states may require statutory authorization.⁵¹⁰ The authority to grant waivers, for instance, typically requires explicit congressional authorization.⁵¹¹ And the Executive cannot preempt state law without a general delegation of lawmaking authority.⁵¹² However, other tools, such as enforcement discretion and resource allocation, may derive directly from Article II powers or customary practice.⁵¹³ Understanding these distinctions is crucial because they shape how the executive branch may—and may not—advance its agenda through state institutions.⁵¹⁴

507. See *supra* notes 486–90 and accompanying text.

508. See generally Bulman-Pozen, *supra* note 136 (examining the dynamics of executive federalism and the ways that states implement, shape, and resist presidential agendas).

509. See *supra* notes 465–84 and accompanying text (discussing the anticommandeering doctrine); see also *supra* note 495 and accompanying text (discussing the anticoercion prong of the conditional-spending doctrine).

510. See *supra* notes 126–30 and accompanying text (discussing executive authority vis-à-vis Congress on matters not derived from the Constitution itself).

511. See David J. Barron & Todd D. Rakoff, *In Defense of Big Waiver*, 113 COLUM. L. REV. 265, 267 (2013) (discussing the power of agencies to “unmake” Congress's law through delegated waiver authority).

512. See *supra* notes 400–14 and accompanying text (discussing how limits on executive power also operate as a limit on executive preemption of state law).

513. See Jack Goldsmith & John F. Manning, *The Protean Take Care Clause*, 164 U. PA. L. REV. 1835, 1847–48 (2016) (discussing case law on prosecutorial discretion); see generally Zachary S. Price, *Enforcement Discretion and Executive Duty*, 67 VAND. L. REV. 671 (2014) (examining the historical roots and practice of executive non-enforcement).

514. These distinctions were visited in Section II.C (explaining that the opportunities for executive–state cooperative arrangements also present opportunities for

Start with waivers. When statutorily authorized, waivers enable a President's administration to exempt states from specific statutory or regulatory requirements.⁵¹⁵ Waivers thus allow the executive branch to initiate policy experiments at the state level without requiring congressional approval for every federal variance.⁵¹⁶ Because the Executive is generally authorized to grant waivers under statutorily prescribed conditions, an administration can withhold or repeal waivers if states do not meet their end of the bargain.⁵¹⁷ For much the same reason, however, executive branch officials have considerable bargaining leverage when states apply for a waiver or to renew waivers received from a former President with different priorities.⁵¹⁸ At those junctions, executive branch officials can extract concessions from states.⁵¹⁹ For example, an administration may offer dedicated funds to states that implement AI policies consistent with the President's agenda and threaten to withhold funds from other states.⁵²⁰

In addition, the executive branch can exercise enforcement discretion to favor politically aligned states. For instance, a presidential administration can continue to fund noncompliant states by effectively turning a blind eye to their infractions.⁵²¹ Moreover, in contexts where a statute permits but does not require administrative preemption, the Federal Executive may issue a binding regulation to displace state law, or not, depending on the President's agenda.⁵²²

Recent efforts by the Trump administration to leverage AI policy against the states illustrate both the attraction and limits of executive AI federalism by design. Most notably, the White House's AI Action Plan directs the Office of Management and Budget to restrict "AI-related" funding to states that adopt

states to resist a President's AI agenda). I am grateful to Jessica Bulman-Pozen for suggesting this point.

515. See Barron & Rakoff, *supra* note 511, at 267.

516. *Id.* (describing waiver authority as a tool that allows agencies to "unmake" Congress's law in specific instances).

517. See Bulman-Pozen, *supra* note 136, at 303–04 (describing how the Obama Administration used waiver renewals as leverage to encourage states to adopt ACA-compliant health exchanges, while the Trump Administration used the same process to allow states to depart from ACA requirements).

518. *Id.* at 298.

519. See *id.* at 303.

520. See *id.* at 303–04. The Impoundment Control Act operates on the constitutional premise that the President must obligate funds appropriated by Congress; however, it permits a President to temporarily withhold the obligation or expenditure of appropriated funds in certain limited circumstances set forth by Congress. See 2 U.S.C. §§ 681–692; Richard Kogan, *FAQs on Impoundment: Presidential Actions are Constrained by Long-Standing Constitutional Restriction*, CTR. BUDGET & POL'Y PRIORITIES 1 (Nov. 21, 2024), <https://www.cbpp.org/sites/default/files/11-21-24bud.pdf> [<https://perma.cc/64G4-V2KS>].

521. Bulman-Pozen, *supra* note 136, at 303–04; see also Kate Andrias, *The President's Enforcement Power*, 88 N.Y.U. L. Rev. 1031, 1124 (2013) (calling attention to the significance of the President's role in administrative enforcement).

522. See Bulman-Pozen, *supra* note 136, at 304–07; cf. *Hillsborough County v. Automated Med. Labs., Inc.*, 471 U.S. 707, 713 (1985) (reviewing an agency's non-preemption decision).

regulations the Administration deems “burdensome” or “unduly restrictive.”⁵²³ If implemented, such spending cuts would face formidable constitutional obstacles.⁵²⁴ Recall that spending conditions on federal grants to states must be unambiguous.⁵²⁵ However, the AI Action Plan neither defines nor specifies what counts as “burdensome” or “unduly restrictive” state regulations.⁵²⁶ Moreover, the breadth of potential cutoffs—stretching from research to education, infrastructure, and law enforcement—severs any plausible nexus between the condition and the purposes of the underlying programs, and could easily cross the line from permissible incentive to unconstitutional compulsion.⁵²⁷ The separation-of-powers problems are equally acute. The Constitution vests the spending power in Congress, not the executive branch.⁵²⁸ The legislative defeat of a substantially similar effort to shut down state AI laws leaves no doubt about Congress’s intentions,⁵²⁹ and no constitutional room for the President to impose similar conditions by executive fiat.⁵³⁰ As this example makes clear, the question of who decides AI policy operates on two dimensions simultaneously: between the national and state governments, and between the federal branches. This “double security” for liberty is the bedrock of our constitutional structure.⁵³¹

C. *Dynamic AI Federalism*

This concluding Section makes the case for embracing a dynamic conception of AI federalism that encourages ongoing policy innovation through political churn and adaptive governance. This conception will be anathema to those who think a frictionless path of AI innovation is best. The structures of federalism make that unlikely. If nothing else, this account may help level-set expectations. More ambitiously, dynamic AI federalism may be something to strive for and design for. The key to its success will be building adaptive governance structures from the start.

523. See *supra* notes 181–84 and accompanying text (discussing the AI Action Plan).

524. David S. Rubenstein, *The AI Action Plan and Federalism: A Constitutional Analysis*, JUST SEC. (July 30, 2025), <https://www.justsecurity.org/118026/ai-action-plan-federalism-analysis/> [<https://perma.cc/385E-Y4ME>].

525. See *South Dakota v. Dole*, 483 U.S. 203, 207–08 (1987); *supra* notes 486–91 and accompanying text (discussing constitutional limits on conditional spending).

526. Rubenstein, *supra* note 524 (“The plan deliberately avoids defining or describing ‘burdensome’ state regulations that would trigger federal withholding.”).

527. See *id.*; *supra* notes 491–96 and accompanying text (discussing requirements of germaneness and anti-compulsion).

528. See U.S. CONST. art. I, § 8, cl. 1 (vesting the spending power in Congress).

529. See *supra* Subsection II.C.3 (discussing failed attempt in Congress to impose a moratorium on state AI laws).

530. See *Youngstown Sheet & Tube Co. v. Sawyer*, 343 U.S. 579, 637–38 (1952) (Jackson, J., concurring) (explaining that presidential power is “at its lowest ebb” when acting contrary to Congress’s expressed or implied will).

531. See THE FEDERALIST NO. 51, at 323 (James Madison) (Clinton Rossiter ed., 1961) (describing the structures of federalism and separation of powers as a “double security” to “the rights of the people”).

1. *Innovation through Iteration*

In the absence of a national AI framework, AI federalism will develop organically through the states. There is value in that, for reasons already discussed.⁵³² Still, the haphazardness of the regulatory patchwork makes it hard to celebrate or fully embrace. A chief concern is the cost and inefficiency associated with multiple states regulating AI in different ways.⁵³³ A closely related concern is the extraterritorial spillover effects that one state's laws may have on out-of-state, or multi-state, interests.⁵³⁴ Such spillovers come in many forms. Some impose economic costs, like when competing state standards force companies to develop multiple versions of their AI systems.⁵³⁵ Others generate primarily political or cultural friction, such as when one state's content moderation requirements conflict with another state's free speech preferences.⁵³⁶

While regulatory spillovers can certainly be problematic, they can also contribute positively to AI federalism in three ways. First, as Professors Heather Gerken and Ari Holtzblatt argue, spillovers can promote national interests.⁵³⁷ When a state like Colorado requires AI impact assessments, for example, it may lead to industry practices that benefit consumers nationwide.⁵³⁸ Second, spillovers force stakeholders to see which policies they can live with and which they cannot.⁵³⁹ What seems untenable may prove to be possible; what seems tenable may prove impossible. Living under someone else's laws may be the only way to find out. Third, the friction occasioned by regulatory spillovers can transform policy gridlock into a search for workable compromises, whether at the state level, national level, or both.⁵⁴⁰ It is *because* of a patchwork of state laws that industry must make

532. See *supra* Sections II.D (discussing the values of AI federalism), III.A (discussing federalism by default).

533. See Levine, *supra* note 386.

534. See *Int'l Paper Co. v. Ouellette*, 479 U.S. 481, 496 (1987) (discussing how application of state law outside the state would “undermine the important goals of efficiency and predictability”); see also Heather K. Gerken & Ari Holtzblatt, *The Political Safeguards of Horizontal Federalism*, 113 MICH. L. REV. 57, 70 (2014); Samuel Issacharoff & Catherine M. Sharkey, *Backdoor Federalization*, 53 UCLA L. REV. 1353, 1422–23 (2006) (explaining that spillovers allow states to export some of the costs associated with their regulations). Cf. Michael S. Greve, *Federalism's Frontier*, 7 TEX. REV. L. & POL. 93, 95, 106–07 (2002) (lamenting state exploitation through regulatory externalization).

535. See Stout, *supra* note 361 (arguing that a patchwork of state AI laws creates significant compliance burdens and economic inefficiencies).

536. See Timothy Shields, *The AI Regulation Nightmare: Why State-by-State Rules are Crushing Your Business Innovation*, KELLEY KRONENBERG (July 11, 2025), <https://www.kelleykronenberg.com/blog/the-ai-regulation-nightmare-why-state-by-state-rules-are-crushing-your-business-innovation/> [<https://perma.cc/AF2-5FQC>] (describing an insurance company that abandoned an AI underwriting tool entirely rather than try to comply with three different state AI regulations with conflicting requirements).

537. See Gerken & Holtzblatt, *supra* note 534, at 90. Although AI regulation was not on their radar—or anyone else's at the time—many of their insights extend to AI regulation, for some of the same, and for some additional reasons expressed here.

538. See COLO. REV. STAT. § 6-1-1703(3)(a) (2024) (requiring deployers of high-risk AI systems to complete and maintain an impact assessment for the system).

539. See Gerken & Holtzblatt, *supra* note 534, at 90.

540. See *id.*

concessions in Congress. Indeed, if there is to be a major AI cooperative federalism program, it will almost certainly be seeded in regulatory friction at the state level.⁵⁴¹

Of course, these productive aspects of regulatory spillovers must be considered alongside their costs. The normative point is only that spillovers can have countervailing benefits for AI federalism. A more abstract concern is that one state's autonomy will undermine another state's self-determination. By and large, however, the Constitution has little to say about how to balance one state's interest in self-rule against that of other states. As previously discussed, the DCC helps alleviate some of the tension by preventing states from enacting protectionist measures that unduly burden or discriminate against interstate commerce.⁵⁴² Moreover, Article IV prevents states from discriminating against out-of-state individuals, but it rarely applies and offers no protection for corporate entities.⁵⁴³ In addition, Article I prevents states from imposing tariffs on goods from other states.⁵⁴⁴ Beyond these narrow constitutional safeguards, the dynamics of horizontal federalism are politically negotiated.⁵⁴⁵ Most notably, Congress can harmonize state law through preemption, spending incentives, or both.⁵⁴⁶

2. *Uncooperative Dynamics*

Cooperative federalism is an approach, not a panacea. While cooperative federalism aims to align state and federal interests in AI regulation, states are not required to participate.⁵⁴⁷ Thus, to the extent not preempted, some states may opt to regulate alongside rather than inside federal programs. Moreover, states that choose to participate may defect or dissent from within cooperative federalism programs—what Professors Jessica Bulman-Pozen and Heather Gerken call “uncooperative federalism.”⁵⁴⁸ Although the national government holds formal supremacy, practical realities complicate this dynamic. Chief among them, the federal government must contend with regulatory intransigence, resource constraints, and its dependencies on

541. For criticism of how these political dynamics undermine a libertarian model of federalism, see generally MICHAEL S. GREVE, *THE UPSIDE-DOWN CONSTITUTION* (2012) (arguing that the Constitution's vision of a federalism in which governments compete to satisfy the preferences of individuals has given way to a cooperative, cartelized federalism, in which interest groups leverage states to extract concessions at the national level).

542. See Subsection III.A.2 (discussing how the DCC constrains state regulations affecting interstate commerce); see also Gerken & Holtzblatt, *supra* note 534, at 74 (“The Court has expressed its concern about spillovers most explicitly in its [DCC] cases.”).

543. U.S. CONST. art. IV, § 1; see also *Toomer v. Witsell*, 334 U.S. 385, 395 (1948) (interpreting the Privileges and Immunities Clause as preventing states from discriminating against citizens of other states without substantial reason).

544. U.S. CONST. art. I, § 10.

545. See generally Gerken & Holtzblatt, *supra* note 534 (discussing and making a positive case for the “political safeguards of horizontal federalism”).

546. See, e.g., *Int'l Paper Co. v. Ouellette*, 479 U.S. 481, 495–97, 500 (1987) (holding that the Clean Water Act implicitly preempted a Vermont plaintiff's nuisance claim against a New York polluter); *supra* Subsection III.B.1 (discussing Congress's conditional preemption and spending powers).

547. See *supra* Subsection III.B.1.

548. See Bulman-Pozen & Gerken, *supra* note 13, at 1265.

states to implement federal policy.⁵⁴⁹ There is always slack in principal–agent relationships, and cooperative AI federalism will be no different.⁵⁵⁰

Even when aims are broadly aligned, this does not guarantee agreement on action. Just for instance, the national government might convene an intergovernmental commission to develop guidelines for AI use in healthcare. However, creating these guidelines could amplify conflicts or entrench divergent viewpoints on data privacy, algorithmic bias, or the appropriate balance between innovation and consumer protection. For better or worse, decentralized states can also add friction to counterbalance dramatic shifts in national policy from one administration to the next. Consider, for example, how states might adopt and entrench a prior President’s agenda in *state* law. While this may frustrate efforts to achieve national uniformity, it can also help to ensure that national AI policy does not calcify at a single point in time or around a single President’s agenda.

The resulting disharmony can frustrate the aims and efficiencies of cooperative institutional design.⁵⁵¹ However, as Bulman-Pozen and Gerken argue, uncooperative federalism can have upsides, too.⁵⁵² When states push back against federal AI guidelines or implement them in unexpected ways, it can highlight unforeseen issues or lead to innovative solutions. Just for instance, if a state finds that federal standards for AI sandboxes are impractical to implement, their struggles could prompt a reevaluation and refinement of the national approach. Furthermore, when states disagree with the federal Executive about how to administer the law, they force attention back to the underlying statute, ensuring that Congress’s laws are not ignored or shrugged aside.⁵⁵³

Embracing dynamic AI federalism doesn’t mean advocating for chaos or constant upheaval. Rather, it calls for creating inherently adaptive governance structures with built-in mechanisms for learning, revision, and responsive policymaking across all levels of government. This might include sunset provisions for specific regulations, mandatory periodic reviews of AI policies, or the establishment of rapid-response regulatory teams to address emerging AI challenges. It is true, of course, that political froth can lead to market instability. Ill-fitting laws may also hinder new market entrants or create unforeseen bottlenecks

549. *See id.*

550. *See* Heather K. Gerken, *Of Sovereigns and Servants*, 115 YALE L.J. 2633, 2641 (2006) (arguing that states draw their power from their position as federal servants, not separate sovereigns); JOHN J. DILULIO, JR. & DONALD F. KETTL, *FINE PRINT: THE CONTRACT WITH AMERICA, DEVOLUTION, AND THE ADMINISTRATIVE REALITIES OF AMERICAN FEDERALISM* 18 (1995) (observing that the federal government has “tremendous difficulty in executing even relatively straightforward policies precisely because state and local governments enjoy such wide latitude in deciding how best to translate federal policies into action, or whether, in fact, to follow federal policies at all”).

551. *See, e.g.*, JOHN D. NUGENT, *SAFEGUARDING FEDERALISM: HOW STATES PROTECT THEIR INTERESTS IN NATIONAL POLICYMAKING* 210 (2009) (“There is nothing to celebrate when states shirk their legal responsibilities by resisting federal laws and regulations intended to remedy pressing social, economic, environmental, and other problems.”).

552. *See* Bulman-Pozen & Gerken, *supra* note 13, at 1280–82 (introducing the positive case for how uncooperative federalism dynamics can serve national interests).

553. *See id.* at 1282–83.

in the AI technology stack. However, these and other unintended consequences underscore the importance of building adaptability into any AI governance framework from the start. As AI continues to transform society in unexpected ways, the capacity for course correction may prove to be federalism's most valuable feature.

CONCLUSION

This Article has provided the first comprehensive account of federalism in the algorithmic age. These insights are important today while the field is relatively fresh. Policymakers, jurists, and advocates must anticipate how federalism doctrine and political forces will interact dynamically in complex and nonobvious ways. The dynamic nature of AI federalism also means this is an ongoing project. This Article provides the analytical foundation and doctrinal mooring for that agenda.