8

Policy and Governance

Overview

Around the world, AI policy is no longer just about regulation. Governments are also investing to build and maintain their own capacity across the infrastructure, data, talent, and models that make up the technology. The number of countries with formal AI strategies continued to grow, with particular momentum among lower-income economies. Legislative activity continued to grow at every level, though in the United States, federal policy shifted toward deregulation even as state legislatures passed a record number of AI-related bills. Globally, advanced model development and large-scale compute remain concentrated in a small number of countries, while more governments pursue sovereign AI strategies. This chapter's analysis pulls from national strategy databases, legislative records, congressional witness data, Epoch AI, and public procurement data from the United States and Europe.

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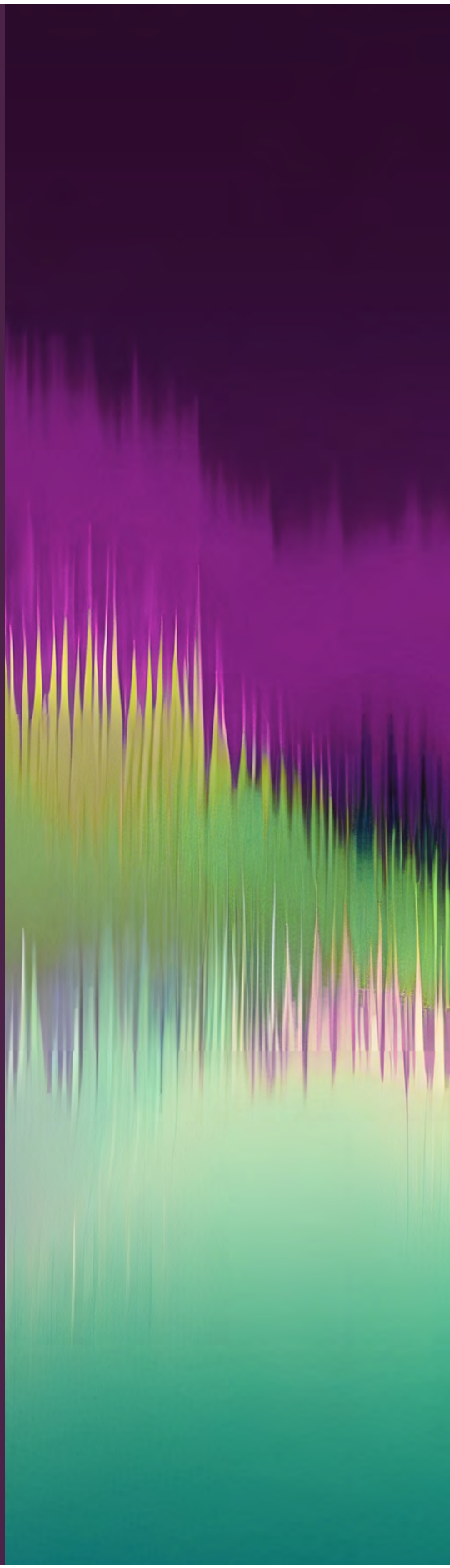


Chapter Highlights

1. **National AI strategies are expanding fastest among countries that had no formal AI policy five years ago.** In 2024, more than half of newly adopted strategies came from emerging economies and, as of 2025, additional countries across sub-Saharan Africa, Central Asia, and the Middle East have strategies in active development.

2. **AI sovereignty, the goal of gaining more agency over domestic AI capabilities, is emerging as a central principle of national AI policy, but the infrastructure underpinning it is unevenly distributed.** Between 2018 and 2025, Europe and Central Asia expanded state-backed AI supercomputing clusters from 3 to 44. South Asia, Latin America, and the Middle East and North Africa have only reached between 2, 3 and 8 each.

3. **Regions are taking different approaches to data sovereignty.** Through 2024, East Asia and the Pacific had adopted 77 data localization measures, followed by sub-Saharan Africa with 71 and Europe and Central Asia with 66. North America, by contrast, recorded only 3, reflecting a different approach to cross-border data flows.

4. **AI-related witnesses in U.S. congressional hearings have grown twentyfold since 2017.** The number rose from 5 in 2017 to 102 in 2025. Industry's share nearly tripled from 13% to 37%, making it the largest witness group, while academia's share fell to 15%.

5. **U.S. public investment in AI remains modest compared to private-sector spending.** Between 2013 and 2024, the United States invested approximately $20.4 billion in AI-related contracts and grants, against $285.9 billion in U.S. private investment in 2025 alone.

6. **European AI public commitments reached approximately $3.7 billion in contracts over 2013–2024.** The United Kingdom accounted for $1.6 billion, followed by Germany with $505 million and France with $320 million. Recent spending is accelerating as well. In 2024 alone, the U.K. committed $454.4 million (28% of its decade total) and Germany committed $206.6 million (40% of its total).

8.1 Major Global AI Policy News in 2025

2025

January 23

US Executive Order 'Removing Barriers to American Leadership in AI'

The U.S. issues an executive order rescinding earlier AI directives and establishing a new policy to enhance U.S. AI dominance, promote innovation, and remove regulatory barriers.

February 1

UK to Criminalize AI Tools Used to Generate Child Sexual Abuse Imagery

The United Kingdom positions itself as the first country to introduce laws against artificial intelligence tools used to generate sexualized images of children.

February 2

1st Measures of the EU AI Act Come Into Effect

The EU's landmark AI regulation takes effect in its first phase, banning high-risk uses (e.g., predictive policing, emotion recognition) and setting the stage for stricter rules.

February 11

AI Action Summit: US and UK Refuse to Sign Inclusive AI Declaration

At the 2025 Paris AI Action Summit, the U.S. and UK decline to endorse a declaration signed by 60 countries on inclusive, ethical AI, signaling divergence in governance approaches.

March 14

China Finalizes Mandatory Labeling Rules for AI-Generated Content

Chinese regulators issue final rules requiring clear labeling of AI-generated and synthetic media, with phased implementation beginning later in the year.

March 24

Zimbabwe Partners With Nvidia to Launch Africa's 1st AI Factory

Cassava Technologies, founded by Zimbabwean billionaire Strive Masiyiwa, announces a partnership with Nvidia to establish the continent's first dedicated "AI factory."

2025

March 25

Utah Enacts the Mental Health Chatbot Act (HB 452)

The bill establishes provisions for regulating mental health chatbots that use artificial intelligence technology. It mandates disclosure of AI use, bans advertising within the chat, and prohibits sharing users' personal data.

April 3

Kigali Summit Highlights Africa's AI Opportunity and Labor Risks

Thousands of delegates convene in Kigali for the inaugural Global AI Summit on Africa to explore how the continent can harness AI for development while mitigating potential disruptions to labor markets.

April 16

Montana Enacts the Right to Compute Act (SB 212)

The law establishes a pro-innovation legal framework for AI that protects Montanans' rights to own and use computational resources for lawful AI activities without undue government restriction.

May 17

Africa Declares AI a Strategic Priority: Investment, Inclusion, and Innovation

The African Union region identifies AI as a central strategic priority, emphasizing inclusion, startup funding, and narrowing the digital divide.

May 19

US Enacts the Take It Down Act, Targeting Nonconsensual Intimate Imagery—Including AI Deepfakes

The law is designed to address the distribution of nonconsensual intimate imagery; it explicitly covers deepfake content and strengthens removal/accountability expectations.

June 17

Gavin Newsom–Commissioned California AI Policy Report Warns of 'Irreversible Harms'

California's state-level report highlights AI threats including biological and nuclear misuse and proposes safety, transparency, and whistleblower frameworks—potentially offering a national blueprint in the absence of federal law.

2025

June 17

G7 Issues Joint Statement Reaffirming Cooperation on AI Governance

G7 leaders release a joint declaration committing to coordination on AI safety, risk management, and standards for advanced AI systems.

June 22

Texas Signs the Responsible Artificial Intelligence Governance Act (TRAIGA) Into Law

Passed in June 2025 and taking effect in 2026, the state law sets strict rules for high-impact AI, including bans on uses that incite harm, violate constitutional rights, or discriminate against protected classes.

July 1

US Senate Strikes 10-Year Federal Moratorium on State AI Regulation

The Senate removes a proposed federal ban on state-level AI regulation from a major spending bill, allowing states to proceed with their own AI oversight laws.

July 10

EU Releases Voluntary Code of Practice for General-Purpose AI

The European Commission publishes a code to guide businesses in complying with the upcoming EU AI Act rules for general-purpose models, covering transparency, copyright, and safety.

July 23

US Launches 'America's AI Action Plan' and 3 Executive Orders

The White House releases a broad AI strategy covering innovation, infrastructure, and diplomacy, plus executive orders on data centers, exports, and government procurement.

July 26

China Announces Action Plan for Global AI Governance

At the 2025 World AI Conference, China's Premier Li Qiang unveils a 13-point road map to advance global AI coordination and standards.

2025

July 30

Creators' Organizations Condemn EU AI Act Implementation

A coalition of 38 global creative-industry bodies issues a joint statement criticizing the EU's AI Act as undermining cultural rights and favoring model-developers.

August 2

EU's General-Purpose AI Obligations Take Effect

Under the EU AI Act, obligations for providers of general-purpose AI models begin to apply, requiring risk assessments, transparency disclosures, and mitigation measures for systems with systemic risk.

August 26

AI Companion Lawsuits Prompt Renewed Scrutiny of Emotional AI Safeguards

Following a widely reported teen suicide linked to interactions with an AI companion, U.S. lawmakers and regulators increase scrutiny of AI companion systems and child-safety safeguards.

August 26

UN Launches Global Scientific Panel and Global Dialogue on AI Governance

The UN General Assembly approves the creation of an Independent International Scientific Panel on AI and a Global Dialogue on AI Governance to provide coordinated scientific guidance and facilitate international cooperation on AI regulation.

September 17

Italy Becomes First EU Member State to Pass an AI Law

Italy advances national AI legislation intended to complement EU-level regulation, reflecting member-state moves to define institutional roles and national implementation.

September 29

California Enacts Landmark AI Safety/Transparency Law (SB 53)

California Gov. Newsom signs SB 53 requiring large AI-model developers to disclose safety protocols and incident reports and to protect whistleblowers.

2025

October 8

European Commission Launches the European Strategy for AI in Science

The Commission announces a strategy to reinforce Europe's technological and scientific leadership and competitiveness by harnessing the potential of AI technologies in science and supporting scientists to adopt them in their research. The strategy contributes to the AI Continent Action Plan and was presented alongside the Apply AI Strategy, which aims to speed up AI adoption in key business and industrial sectors.

October 13

California Enacts New AI Laws

California enacts multiple AI-related bills—SB243 regulating companion bots, AB853 requiring gen AI developers to ensure their tools' content includes provenance data, and AB621 extending existing state law on nonconsensual deepfakes.

November 5

UNESCO Adopts Global Standards on Neurotechnology

UNESCO approves international standards covering AI-driven neurotechnology—"neural data" rights, mental privacy, and emerging regulation.

November 24

US Executive Order Launches the Genesis Mission

An executive order launches the Genesis Mission, a major national initiative to accelerate scientific discovery and technological innovation using artificial intelligence. The mission, compared in ambition to the Manhattan Project, tasks the Department of Energy with leading the effort.

December 11

Launch of Pax Silica: US-led AI and Technology Supply-Chain Cooperation Initiative

At a summit convened by the U.S. Department of State, the Pax Silica Declaration is signed by multiple countries to strengthen trusted technology and AI-relevant supply chains, spanning semiconductors, data infrastructure, and AI hardware cooperation.

December 12

US Executive Order Seeks to Curb State-Level AI Laws

A U.S. executive order aimed at limiting or preempting state AI regulation to "enhance the United States' global AI dominance through a minimally burdensome national policy framework for AI."

8.2 National AI Strategies

As AI becomes more central to economic development and national competitiveness, more governments are moving to formalize their approach through national AI strategies. This section draws and builds on data from Oxford Insights to track the adoption and geographic expansion of formal national strategies over time. The dataset captures what has been published, rather than how or how well it has been implemented, so results should be viewed as policy intent rather than actual progress.

By Geographic Area

More countries adopted national AI strategies in 2024 and 2025, especially within emerging economies (Figure 8.2.1). This marks a shift in AI governance from earlier years, as countries that have historically played a smaller role in AI policymaking are now putting formal national strategies in place.

New frameworks have surfaced across sub-Saharan Africa (such as Ethiopia, Ghana, and Nigeria), South and Central Asia (notably Sri Lanka and Nepal), and Latin America and the Caribbean (including Costa Rica and Jamaica). With strategies already under development in Mexico and South Africa, this trend underscores AI policy's increasing global reach. High-income economies continue to contribute new strategies as well, though at a slower pace and with a focus on consolidating earlier frameworks. European countries, such as Malta, have released updated strategies to align with EU AI Act requirements.

As more countries adopt national AI strategies, there is a rising consensus that AI serves as a lever to bolster state capacity. International cooperation, technical assistance, and policy diffusion also play an important role in this expansion. However, the next challenge is implementation and strengthening regulatory capacity, particularly in Africa, where many countries still lack formal strategies and risk falling behind in AI governance and readiness.

Countries with a national strategy on AI

Source: Oxford Insights, 2024; AI Index, 2026 | Chart: 2026 AI Index report

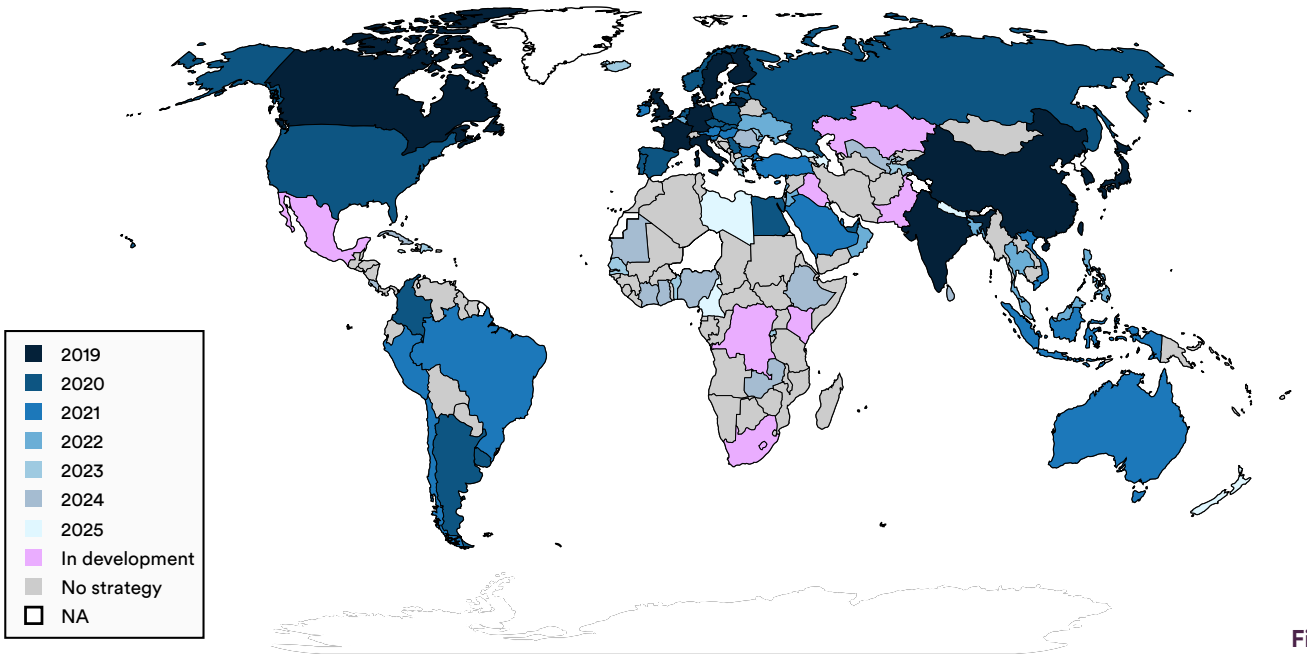


Figure 8.2.1

8.3 AI Sovereignty

As AI technologies become increasingly central to geopolitics and statecraft, and more countries articulate national strategies, attention has shifted to issues of control, capacity, and dependence across the AI stack. In policy terms, AI sovereignty describes a state's capacity to act deliberately and make independent decisions over the development, deployment, and governance of AI systems within its jurisdiction and, in some cases, beyond it through standards, trade, and regulation.

As AI systems have become more central to economic policy, national security, global trade, and cultural autonomy, sovereignty debates have expanded beyond data and infrastructure to include other parts of the AI stack, including compute, model development, talent, and responsible AI deployment. Many of these debates build on earlier discussions of digital and technological sovereignty, which focused on government authority over digital infrastructure, data flows, capabilities, and technology supply chains. Today, governments are pursuing a range of approaches across these layers, including investments, procurement policies, regulatory measures, international partnerships, and supply-chain strategy.

This section draws on data from Epoch AI, Zeki, and Brookings to examine how sovereignty dynamics are evolving across compute infrastructure, data, models, applications, and talent.

Infrastructure Sovereignty

Domestic AI computing infrastructure, including high-performance GPU clusters and AI-optimized supercomputers, has become one of the most visible areas of AI sovereignty investment. In policy discussions, domestic compute capacity is often framed around reducing reliance on foreign providers, limiting exposure to extraterritorial jurisdiction, and providing continuity of access for government agencies, research institutions, and domestic firms in scenarios such as export controls, geopolitical disputes, and supply-chain disruptions.

In this context, the scale and availability of state-owned or state-backed AI supercomputing facilities is increasingly used as an indicator of "compute sovereignty" alongside related measures such as domestic access to advanced chips, cloud capacity, and the governance arrangements that determine who can use these resources and for what purposes.

Based on data from Epoch AI tracking large-scale GPU clusters used for training advanced AI models,[1] state-backed AI supercomputing expanded across most regions between 2010 and 2025 (Figure 8.3.1). The sharpest acceleration was in Europe and Central Asia, where the number of clusters grew from 3 to 44 between 2018 and 2025, largely driven by coordinated initiatives such as the European High Performance Computing Joint Undertaking (EuroHPC JU). North America grew nearly sevenfold over the same period to reach 41 clusters, a substantial expansion given its comparatively high baseline, reflecting a policy shift toward dedicated national AI research infrastructure, including through the U.S. National AI Research Resource (NAIRR). East Asia (excluding China) grew about fourfold. By contrast, South Asia, the Middle East and North Africa, and Latin America and the Caribbean each only doubled or tripled, reaching 2, 3, and 8 clusters, respectively, by 2025. Several initiatives to expand capacity are already underway in these regions, though planned systems are not included here as they are subject to change and carry inherently lower confidence.

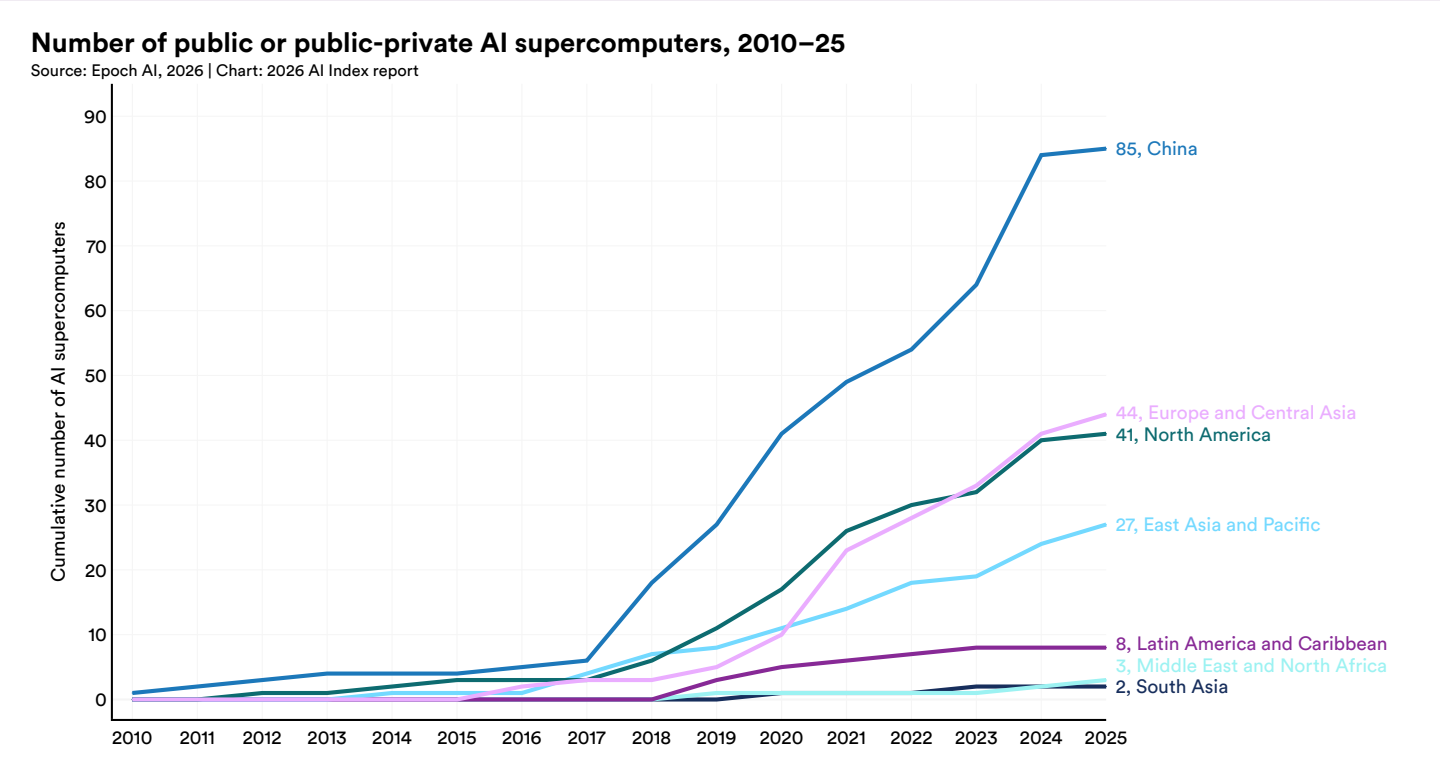


Figure 8.3.1

Although privately owned clusters account for most large-scale AI compute capacity globally, state-owned and public-private clusters have also grown steadily across most regions. In practice, this distinction is clouded because many private clusters remain accessible to public sector actors through commercial cloud services. Public-private partnerships can involve both domestic and international actors (Figure 8.3.2). OpenAI's Stargate project, for example, extends beyond the United States through country-level partnerships across regions, including the United Arab Emirates, the United Kingdom, Argentina, South Korea, India, and Norway. Nvidia's "AI Factory" is a different approach in which in-country compute capacity is typically built in partnership with domestic telecommunications providers, a model that has expanded rapidly by catering to governments' sovereign AI ambitions. These initiatives illustrate how private firms are playing an increasingly central role in building what many governments designate as national AI infrastructure.

1 Because the underlying dataset captures frontier AI training capacity rather than the full universe of compute resources, the figure should be interpreted as a proxy for sovereign high-end AI compute infrastructure rather than a comprehensive measure of national compute capacity.

Countries with publicly announced Nvidia or OpenAI infrastructure initiatives, 2025
Source: Stanford HAI, 2026 | Chart: 2026 AI Index report

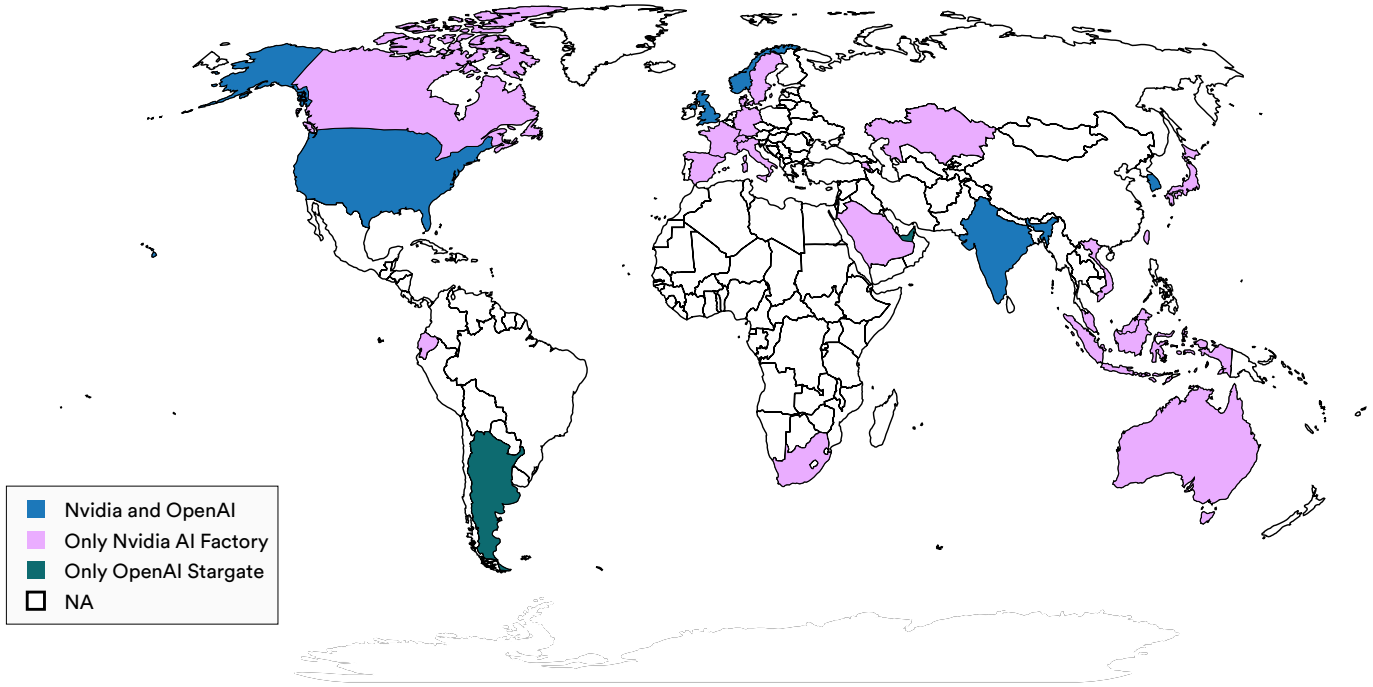


Figure 8.3.2

Data Sovereignty

While infrastructure sovereignty focuses on control over compute resources, data sovereignty concerns the extent to which states or local actors have agency over how their data is collected, stored, processed, and transferred. One common approach is to adopt data localization measures[2] that require certain categories of data to remain within national borders or to impose restrictions on cross-border data transfers. As AI systems grow increasingly dependent on vast, diverse datasets, data sovereignty has emerged as a central dimension of the broader AI sovereignty debate.

Data localization measures have increased across nearly every region since 2000 (Ferracane et al., 2025, Figure 8.3.3). The steepest rise in adoption begins around 2016, coinciding with the implementation of GDPR in Europe and the subsequent "Brussels Effect," whereby other nations adopted similar frameworks. Regional patterns fall into three broad clusters: high-localization regions led by East Asia and Pacific (77 measures), followed closely by sub-Saharan Africa (71) and Europe and Central Asia (66); moderate-localization regions including the Middle East and North Africa (44), Latin America and the Caribbean (36), and South Asia (24); and North America, which remains a striking outlier at just 3 measures, reflecting a long-standing "flow-first" policy orientation.[3]

2 While there is no single official definition, data localization measures are broadly understood as explicit requirements that data be stored and/or processed within a domestic territory, encompassing both outright storage mandates and conditional restrictions on cross-border transfers (López González et al., 2022).

3 This pattern is well documented (World Bank, 2025), reflecting a general tendency—particularly within the U.S.—to favor free data flows from which its firms disproportionately benefit. As one example, U.S. diplomats have recently been tasked with pushing back against other countries' data sovereignty initiatives (Reuters, 2026). At the same time, emerging restrictions such as those on the transfer of bulk sensitive personal data to "countries of concern" signal a growing willingness to impose targeted controls.

Data localization measures by region, 2000–24
Source: Ferracane et al., 2026 | Chart: 2026 AI Index report

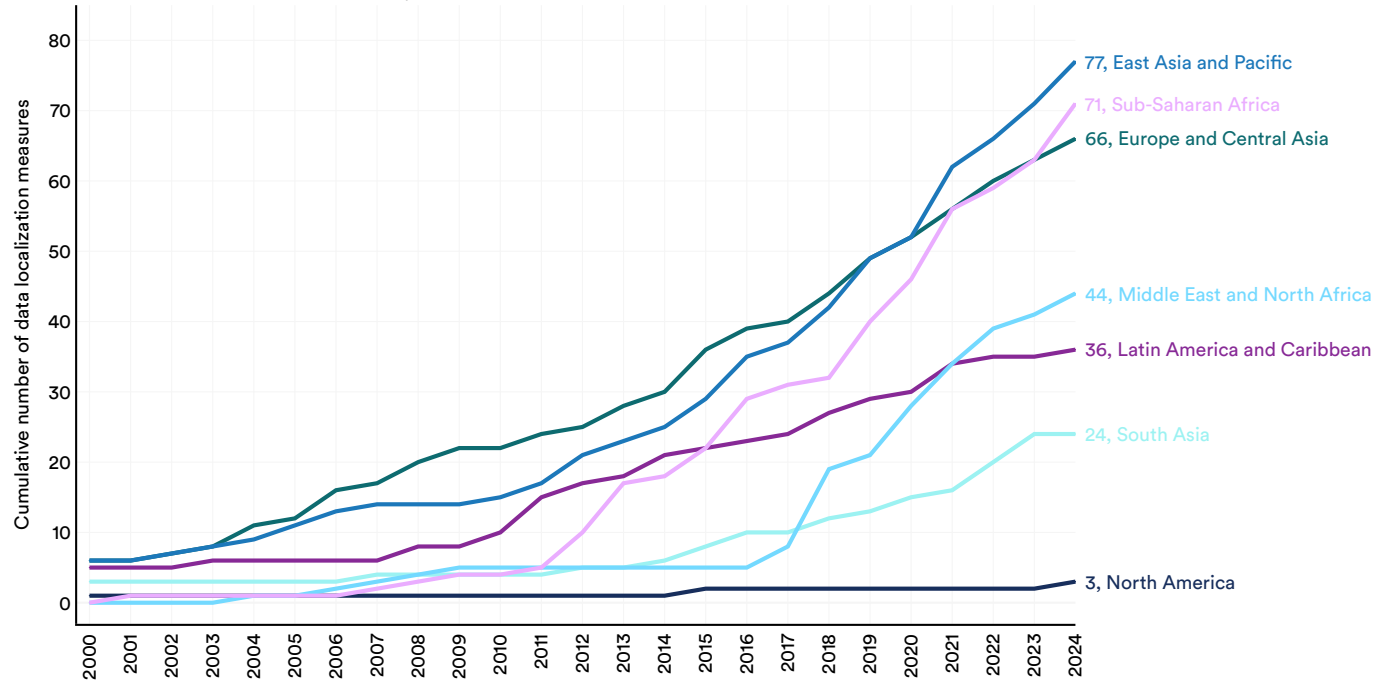


Figure 8.3.3

Model Sovereignty

Model sovereignty concerns a state's capacity, influence, and control over the development and deployment of AI models. As discussed in Chapter 1, advanced AI model development has historically been concentrated in a small number of technology hubs, primarily in the United States and China. While that persists, open-source frameworks have lowered barriers to entry, and a growing number of regions are building and deploying their own models (Figure 8.3.4). This trend reflects a growing emphasis on localizing model development even if countries can deploy U.S.- or Chinese-made models.

Number of AI models released by region, 2018–25
Source: Epoch AI, 2026 | Chart: 2026 AI Index report

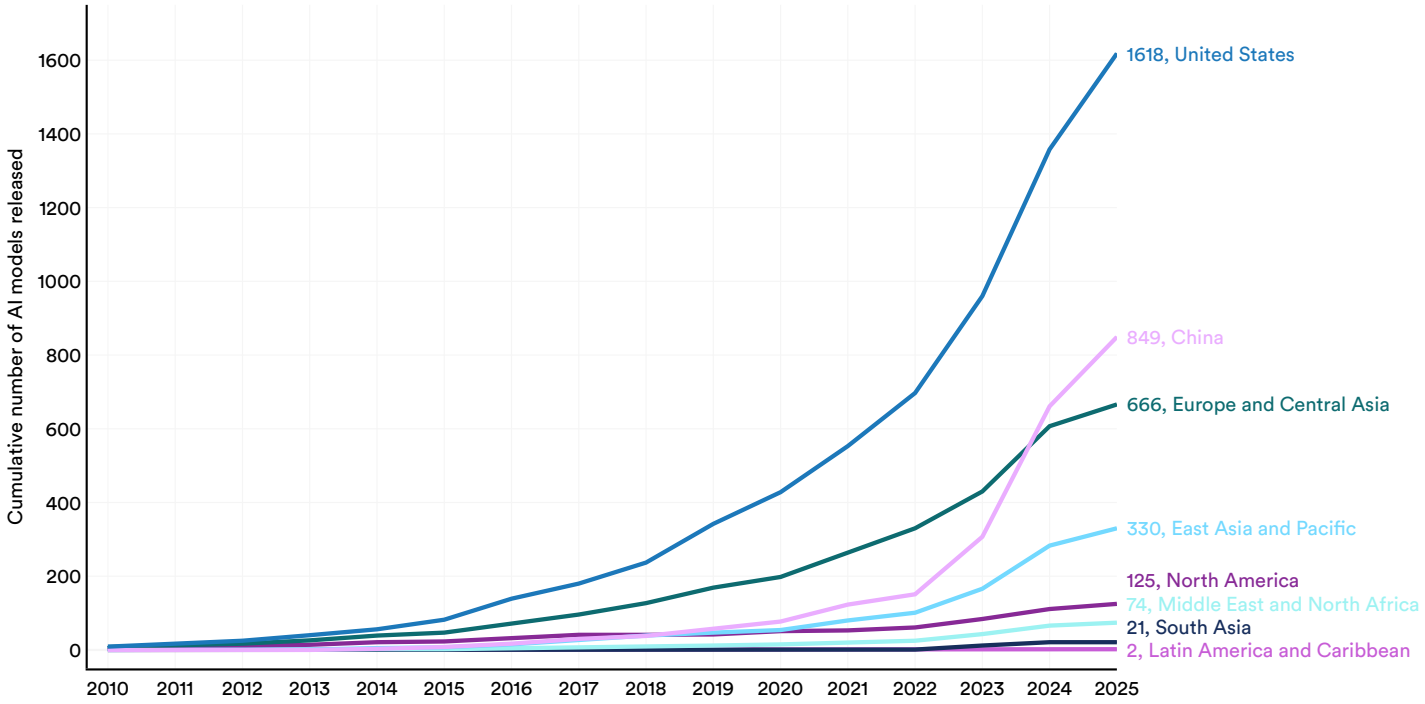


Figure 8.3.4

Based on Epoch AI data tracking publicly reported model releases, cumulative U.S. model releases grew from 237 to 1,618 between 2018 and 2025. China exhibits a similar acceleration between 2022 and 2025, where model releases more than quintupled from 151 to 849, suggesting a rapid scaling of domestic capabilities and intensified competition with U.S. model development. These figures reflect the full range of publicly documented model releases by Epoch AI, including smaller and less prominent ones. This differs from the notable model dataset used in Chapter 1, which applies narrower criteria such as state-of-the-art performance and high citation counts. The two datasets can show different year-over-year patterns because the broader count here is more representative of the expanding base of model development, while the subset in Section 1.1 of Chapter 1 is more sensitive to the changes at the frontier. Europe and Central Asia show steady growth, increasing from 127 to 666 models over the same period, with the United Kingdom (229 models) and France (141) as leading contributors, while Canada (captured by the North America region) trails in fifth place with 125 models.

East Asia and the Pacific (excluding China) grew from 39 to 330 models by 2025, while the Middle East and North Africa, South Asia (largely driven by India), and Latin America and the Caribbean reached only 74, 21, and 2 models, respectively. Several of these regions are beginning to champion national or regional model initiatives, such as Chile's Latam-GPT, the UAE's Falcon series, and Singapore's SEA-LION, though their overall footprint remains limited. These figures should also be interpreted as conservative estimates, as model documentation and reporting are less systematic in these regions. The growing ecosystem of smaller and language-specific models in sub-Saharan Africa, for example, are not represented at all.[4]

4 AfriBERTa (Ogueji et al., 2021), AfriTeVa (Jude Ogundepo et al., 2022), AfroLM (Dossou et al., 2022), EthioLLM (Tonja et al., 2024b), EthioMT (Tonja et al., 2024c), and AfroXLMR (Alabi et al., 2022).

Overall, model production remains concentrated, with the United States and China accounting for a disproportionate share of global activity. At the same time, complementary evidence from AI-related GitHub activity suggests that open-source development is diffusing more broadly across regions, even as significant asymmetries in scale and capability persist (see Section 1.5 of Chapter 1 for full analysis).

Application Sovereignty

A fourth dimension of AI sovereignty concerns the capacity, agency, and control over the downstream deployments of AI systems within a nation's public and private sectors. Application-level sovereignty encompasses domestic procurement policies; sector-specific regulatory requirements in domains such as health, finance, and defense; and the Digital Public Infrastructure (DPI) upon which AI applications increasingly sit. Together, these determine how much a country can shape the AI systems with which its institutions and citizens interact.

Public investment in AI-related contracts and grants offers one observable signal of how governments are implementing this form of sovereignty in practice (see Section 8.5 for a full analysis of public AI investment trends across the U.S. and Europe). Beyond public investment, however, comprehensive cross-country data on sovereignty-oriented AI procurement preferences, sectoral deployment mandates, and DPI utilization for AI remains limited, reflecting both the novelty of the concept and the opacity of procurement data across jurisdictions.

Distribution of AI applications by geographic area, type, and funding

Source: Brookings, 2026 | Chart: 2026 AI Index report

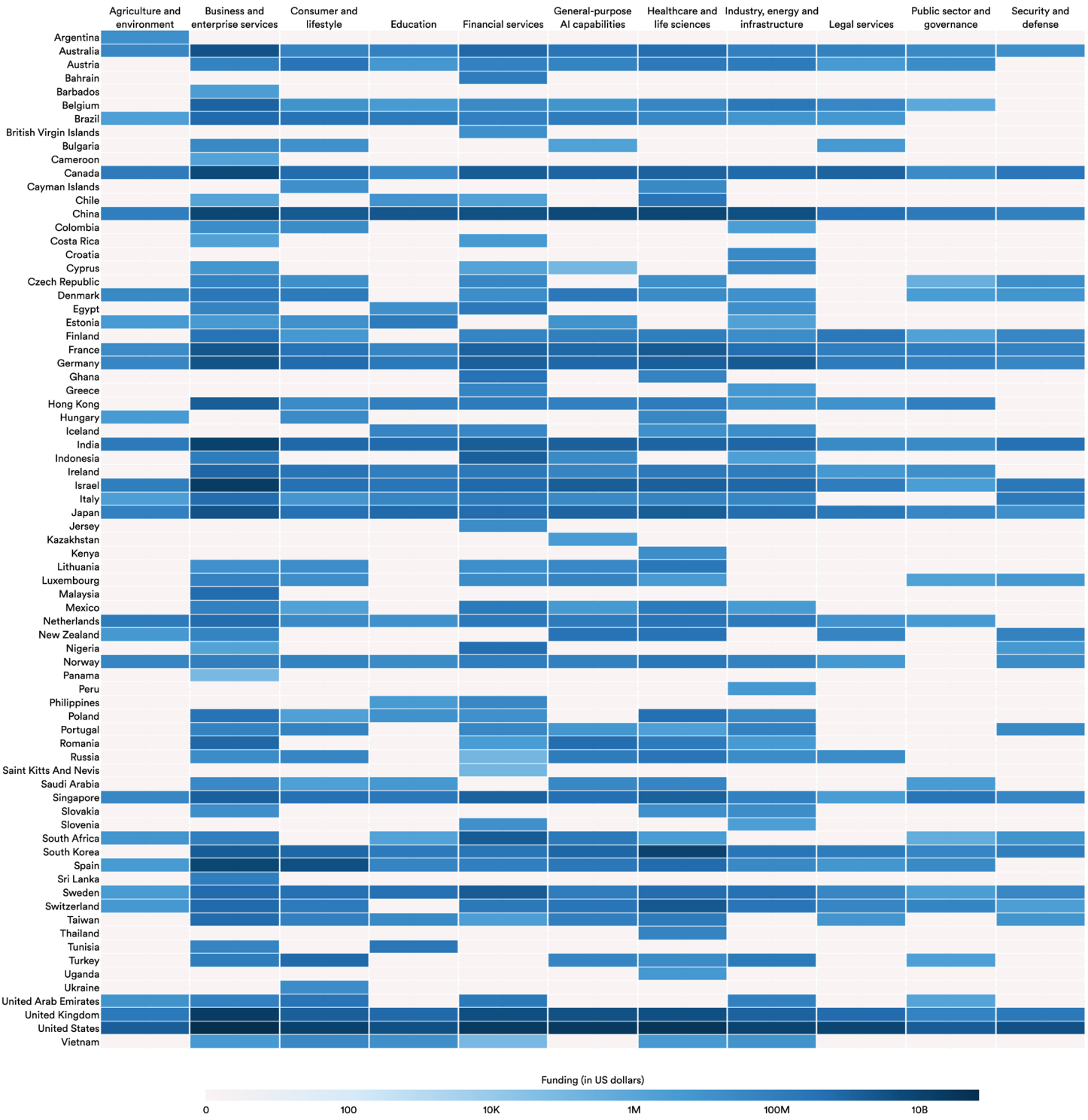


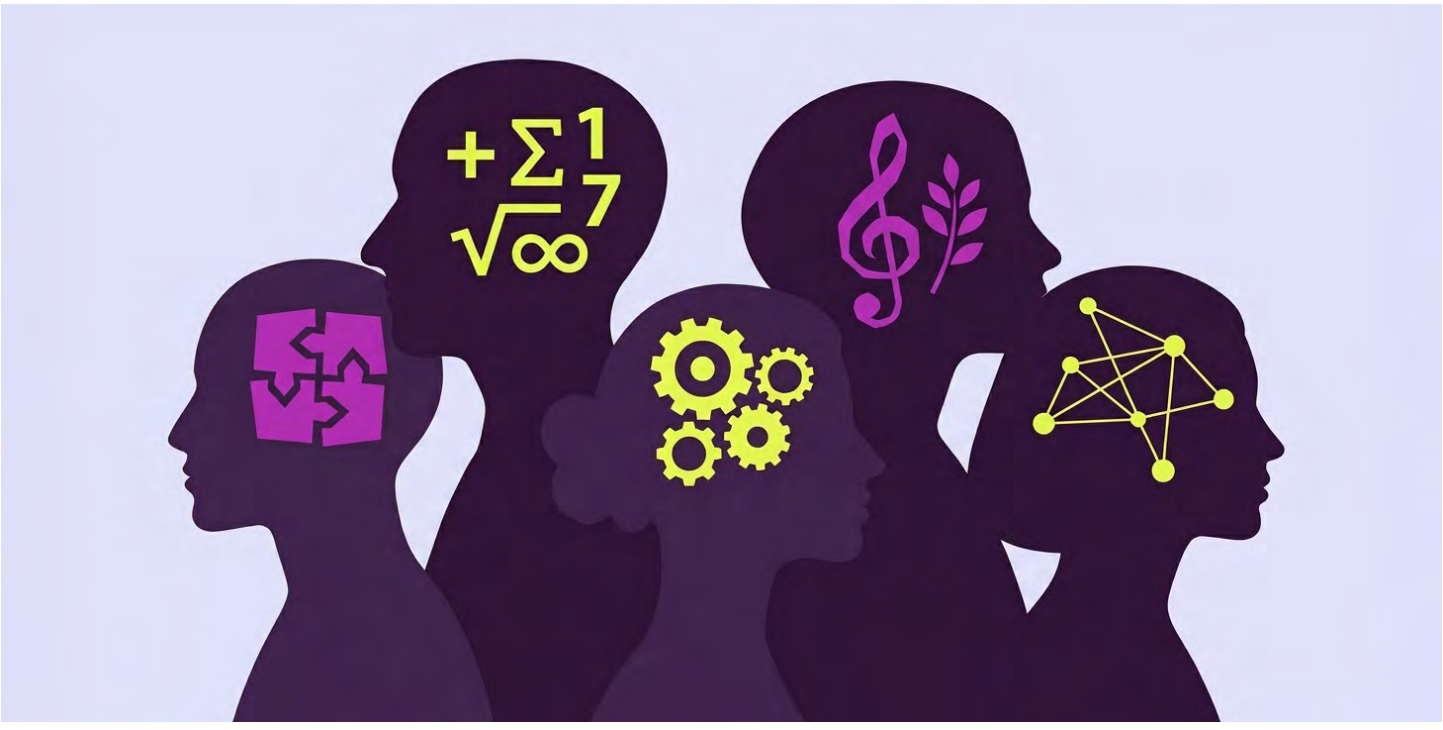
Figure 8.3.5

Countries are increasingly concentrating AI investment in domains aligned with institutional strengths and policy priorities (Figure 8.3.5). A small set of countries, most prominently the United States, China, and several European economies (UK, Germany, France), show high-intensity investment across nearly all application categories. Most other countries display concentrated areas of focus, indicating selective investment rather than full-spectrum capability.

Within Europe, Germany's strength is in industrial applications (particularly manufacturing) and Estonia's is in education technologies. Sub-Saharan African countries show stronger engagement in financial applications, led by South Africa. Latin America presents a more uneven pattern, with Brazil investing broadly while countries such as Chile and Argentina concentrate on more specific domains, including healthcare and agricultural applications, respectively. In the Middle East and North Africa, similar dynamics emerge, with Israel standing out for its specialization in security and defense applications, consistent with its broader positioning as a global cybersecurity hub. The application layer, as it is less concentrated than the model or compute layer, offers more space for countries to develop niche specializations, enabling them to exercise greater autonomy both domestically and internationally over these systems.

Talent Sovereignty

A fifth dimension of AI sovereignty is a nation's ability to develop and retain the human capital needed to build, deploy, and govern AI systems. Talent sovereignty includes two closely related dynamics: workforce capacity, the domestic stock of AI skills and expertise, and talent mobility (the extent to which countries attract, retain, or lose AI specialists across borders). The country-level distribution and mobility patterns of AI authors and inventors offer a direct window into this dimension and is also discussed in detail in Section 1.8. of Chapter 1. Broader labor market indicators, including AI talent concentration and workforce trends across countries, are examined in Section 4.4 of Chapter 4.



Inflow and outflow of top AI authors and inventors by region, 2016–25

Source: Zeki Data, 2025 | Chart: 2026 AI Index report

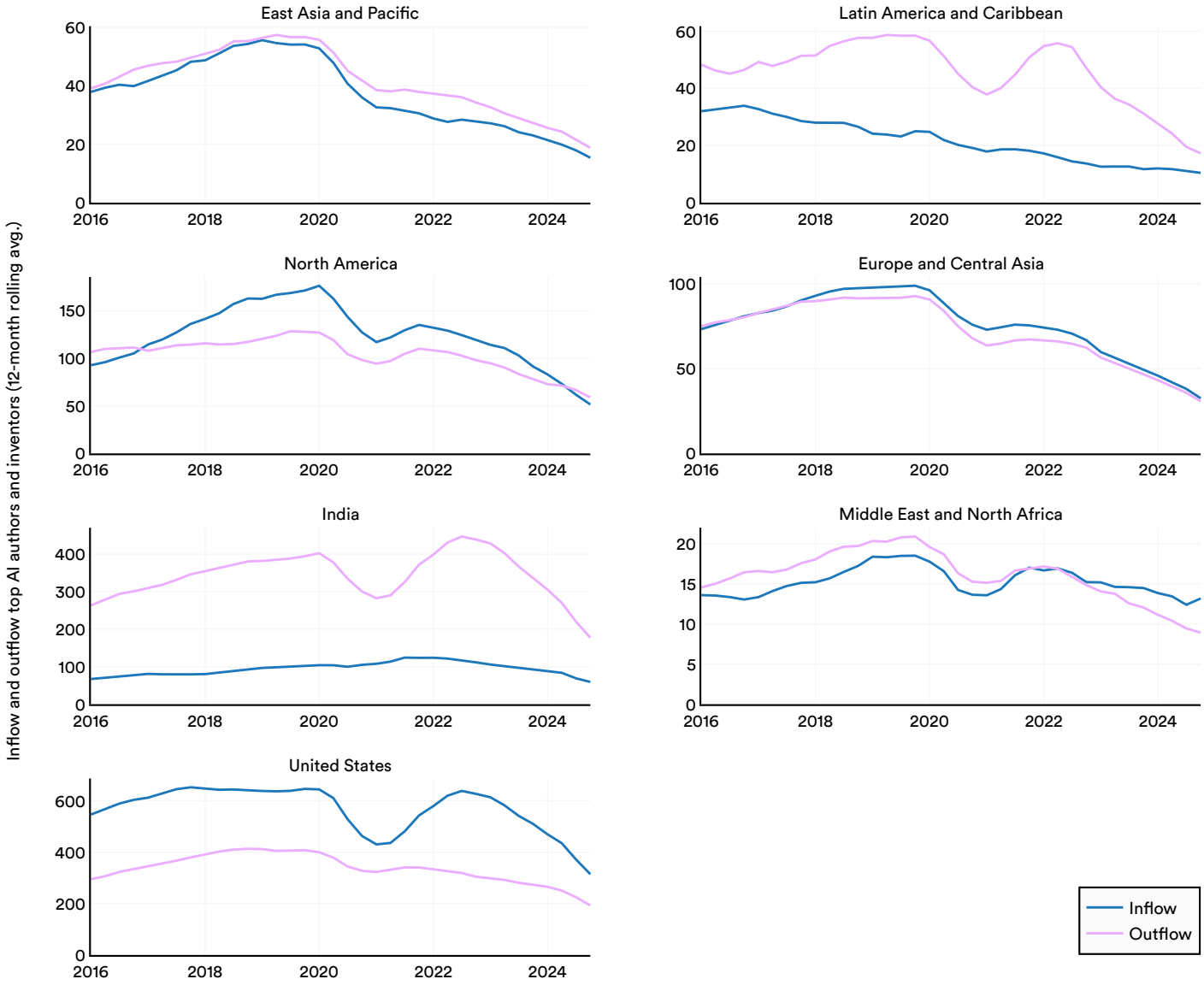


Figure 8.3.6

Cross-border AI talent circulation has slowed recently, even where net flows remain stable (see Section 1.8 of Chapter 1). Both inflows and outflows are declining, suggesting that talent is increasingly staying within national or regional systems rather than circulating globally (Figure 8.3.6). The United States is currently the primary global attractor of top AI talent, though its lead is rapidly narrowing. By contrast, India is transitioning from a net exporter to a net absorber of talent. The near mirror-image relationship between the two countries reflects the well-documented fact that the U.S. has been the main destination for Indian AI talent. At the same time, the Middle East and North Africa are making incremental gains, a sign that new talent hubs are emerging with the support of targeted policy and investment.

8.4 AI and Policymaking

Legislative activity is a signal of how governments are responding to AI beyond national strategies. This section tracks AI-related bills passed across G20 countries, drawing on data from Digital Policy Alert.[5] The dataset covers enacted legislation, not proposed or pending bills. Counts should be interpreted with caution as they may understate the actual volume of AI-related policymaking, since large omnibus bills that contain multiple AI provisions are counted as a single piece of legislation. Volume is also not a measure of significance, as a single major law can carry more impact and enforcement weight than dozens of narrower ones.

Global Legislative Records on AI

In 2016, there were no AI-related laws on record among G20 countries. Since then, legislative activity has been on the rise, though the total number of laws passed varies widely by country (Figures 8.4.1 through 8.4.3). Between 2016 and 2025, the United States passed the most AI-related bills, 25 in total, followed by South Korea with 17. Japan, France, and Italy were also relatively active, with each passing 9 to 10 laws. Over the same period, other countries, such as Russia and Saudi Arabia, passed very few, if any, AI-specific legislation. Similar to other aspects of AI development, such as investment and research output, policymaking is expanding but unevenly.

Number of AI-related bills passed into law in G20 countries, 2016–25

Source: AI Index; Digital Policy Alert, 2026 | Chart: 2026 AI Index report

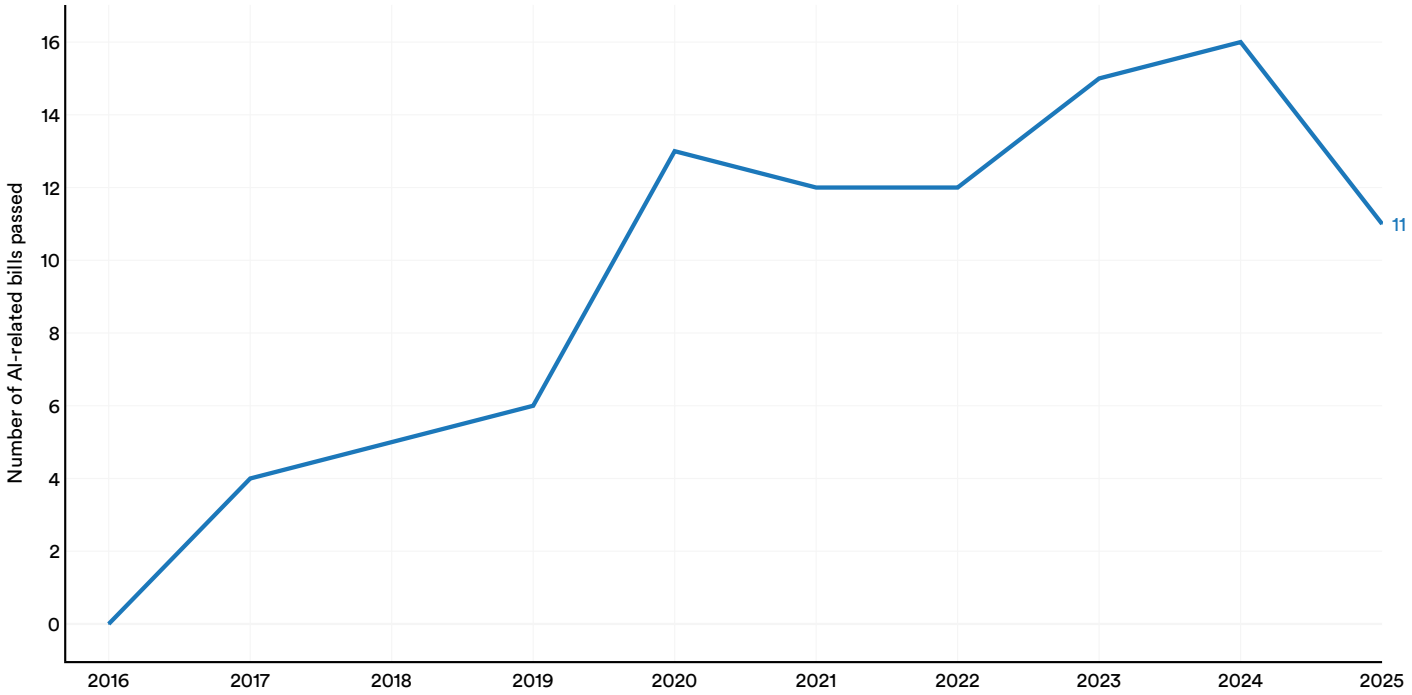


Figure 8.4.1

5 Numbers may differ from what was reported in the 2025 AI Index report, as the methodology has changed. In addition, the following charts focus only on G20 countries.

Number of AI-related bills passed into law in G20 countries, 2016–25

Source: AI Index; Digital Policy Alert, 2026 | Chart: 2026 AI Index report

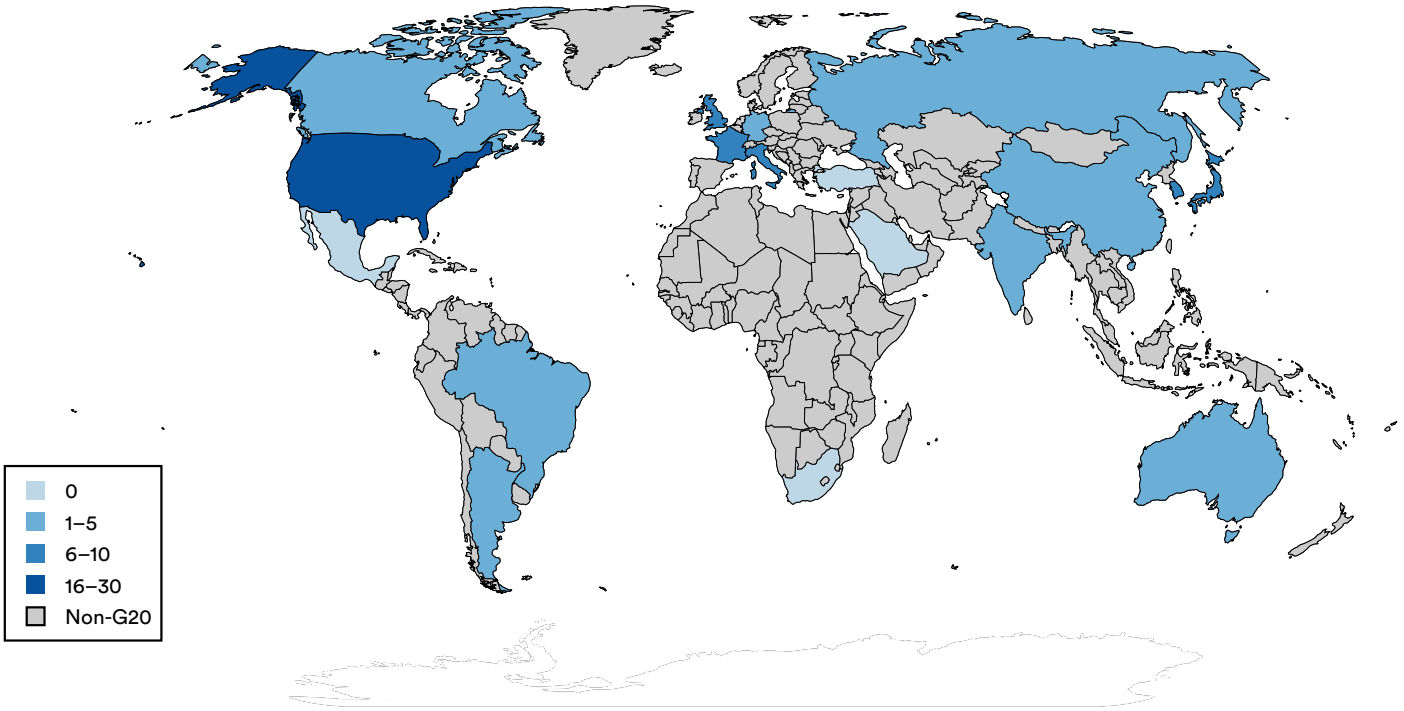


Figure 8.4.2

Number of AI-related bills passed into law in G20 countries, 2016–25 (sum)

Source: AI Index; Digital Policy Alert, 2026 | Chart: 2026 AI Index report

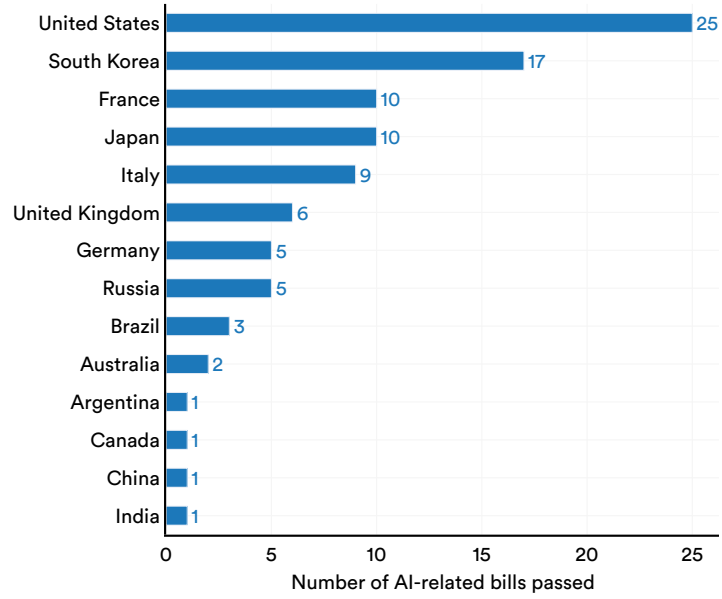


Figure 8.4.3

HIGHLIGHT:

A Closer Look at Global AI Legislation

Country	Bill name	Description
United States	Take It Down Act (Tools to Address Known Exploitation by Immobilizing Technological Deepfakes on Websites and Networks Act)	This act criminalizes the nonconsensual distribution and disclosure of intimate visual depictions, including AI-generated or digitally altered deepfakes. It mandates that online platforms remove reported content within 48 hours and strengthens enforcement through federal criminal penalties and a civil cause of action allowing victims to sue for damages.
Italy	Provisions and Delegated Powers to the Government on the Matter of Artificial Intelligence (Law No. 132/2025)	This law establishes a national framework for responsible, transparent, and human-centered AI in Italy, aligned with the EU AI Act (Regulation 2024/1689). It sets principles and governance directions for AI strategy and sectoral deployment, and addresses user safeguards, copyright-related issues, and penalty provisions for specified unlawful uses.
Japan	Act on the Promotion of Research and Development and Utilization of Artificial Intelligence–Related Technology	This law provides a national framework to promote AI research, development, and utilization by defining responsibilities for the national government, local governments, research institutions, and businesses. It mandates an AI Basic Plan and establishes a prime minister–led AI Strategy Headquarters to coordinate cross-government policy and international cooperation.
South Korea	Framework Act on the Development of Artificial Intelligence and the Creation of a Foundation for Trust	This law sets South Korea's overarching policy and governance framework for advancing artificial intelligence while building conditions for trustworthy and ethical AI. It provides the primary statutory basis for government-led AI strategy, coordination, and support measures, and for developing standards and safeguards intended to promote public trust alongside industrial innovation.

US Legislative Records

The United States has passed more AI-related laws since 2016 than any other G20 country, making it a useful case to examine how AI is being addressed through domestic policy channels. Within the U.S., AI has become a cross-cutting policy issue that touches on governance, national security, public services, and individual rights. This section tracks AI-related bills enacted at the state level as well as the composition of witnesses at congressional AI hearings and federal regulatory activity.

State Level

State legislatures have been the active venue for AI policymaking in the United States, particularly in the absence of comprehensive federal AI legislation. Across all states, the total number of AI-related bills passed increased from fewer than 10 in 2020 to 150 in 2025 (Figures 8.4.4 to 8.4.6). However, a small number of states accounted for a disproportionate share of legislation enacted in 2025. California enacted 20 AI-related

bills, double the total in New York (10) and two-thirds more than Texas (12), the second most active state. Over the full 2016–2025 period, California had more than double any other state, with 62 bills enacted. Maryland (28), Virginia (25), and Utah (24) also had records that reflect consistent activity across multiple legislative cycles. Two states—Missouri and Rhode Island—have not enacted any AI-related legislation to date.

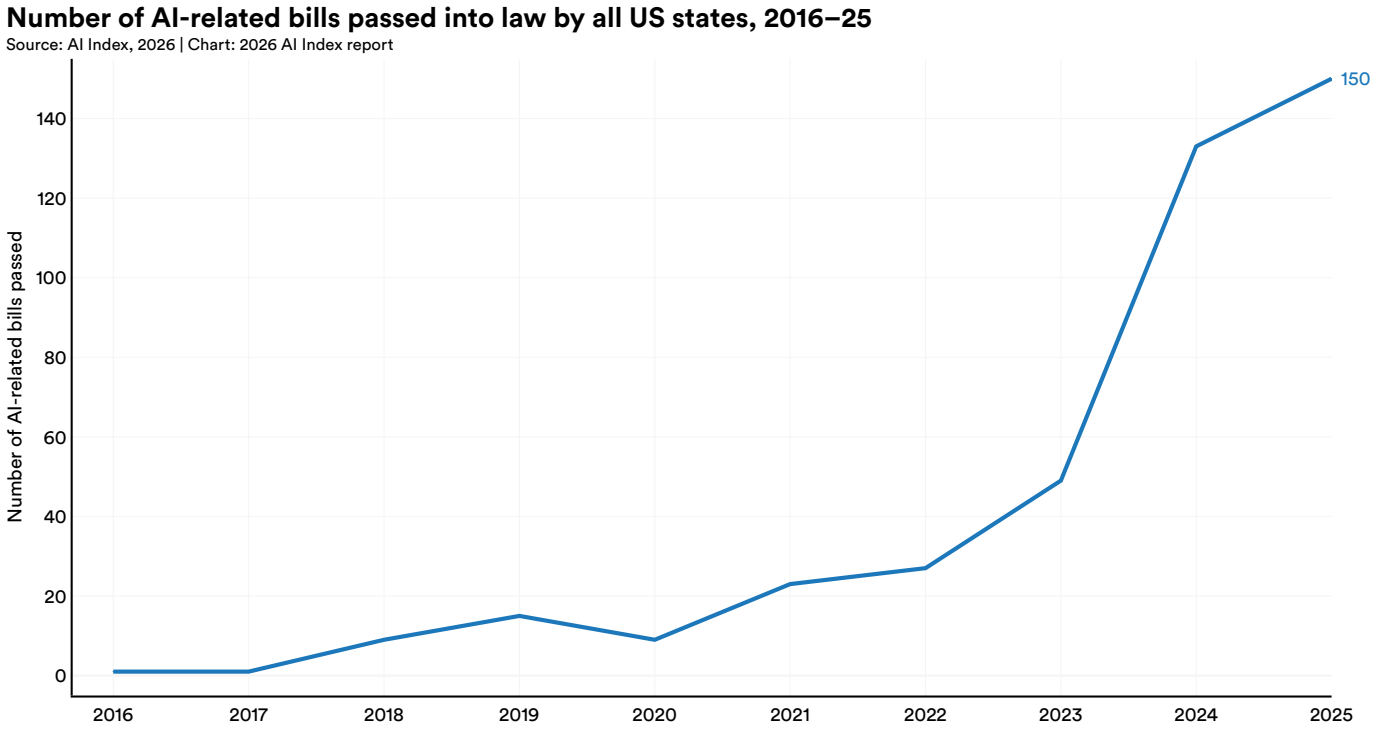


Figure 8.4.4

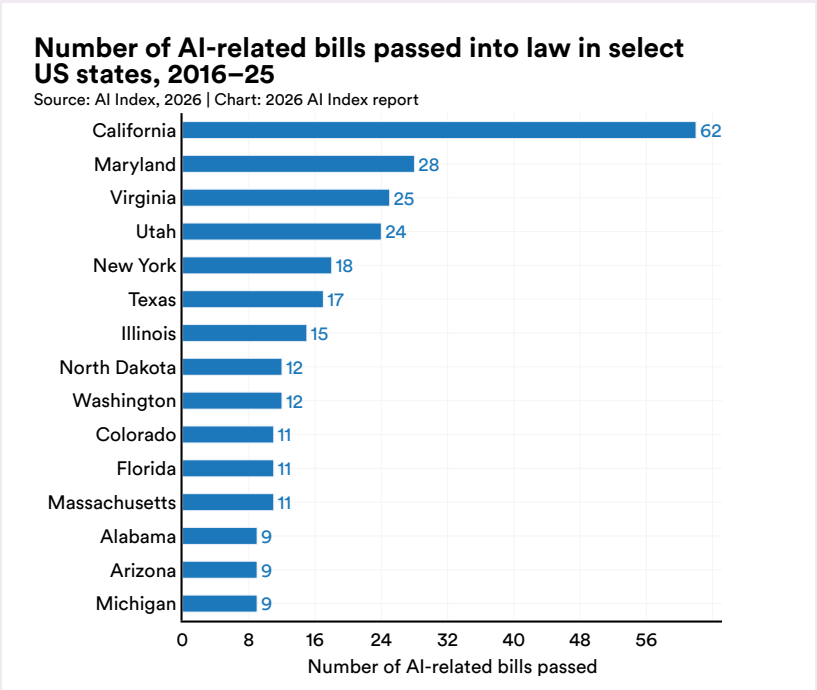


Figure 8.4.5

Number of state-level AI-related bills passed into law in the United States by state, 2016–25 (sum)
Source: AI Index, 2026 | Chart: 2026 AI Index report

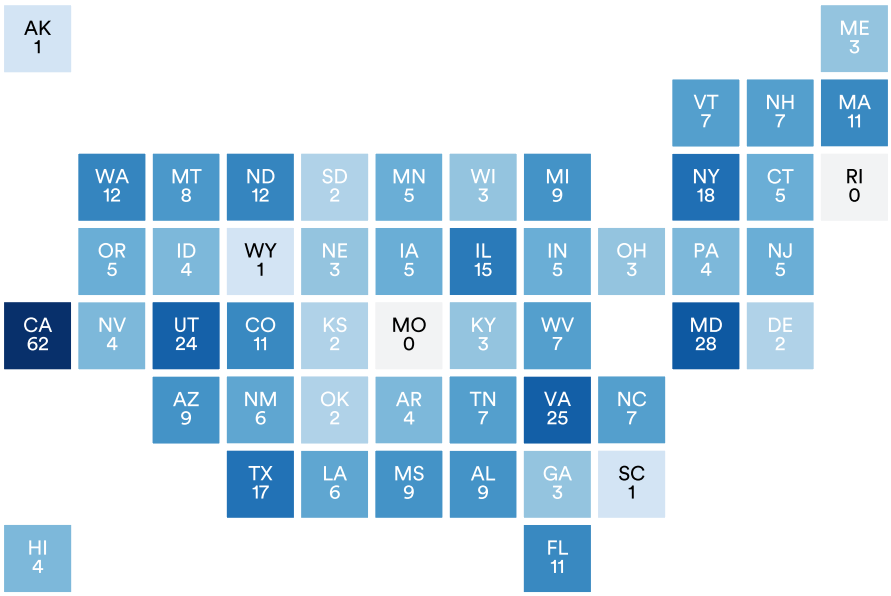


Figure 8.4.6

HIGHLIGHT:

State AI Legislation Amid Shifting Federal Policy

While federal AI policy shifted toward deregulation in 2025, state legislatures continued to move ahead with AI-specific laws on their own in the absence of a federal framework.[6] State policies are developing across different tracks, including targeted protections against discrimination, misinformation, and abuse. Several of the most prominent state actions, including Utah's Mental Health Chatbot Act, Montana's Right to Compute Act, and Texas' Responsible AI Governance Act, are also listed in the timeline at the start of this chapter.

To have greater comprehensive oversight on AI use, some states pursued broader frameworks. Colorado's Artificial Intelligence Act, signed in May 2024, was among the first state laws targeting algorithmic discrimination in decisions such as hiring, housing, and medical care. However, the

6 The state tracker counts only bills whose final enacted text includes the phrase "artificial intelligence," based on searches conducted across all 50 state legislative websites. While this filter makes the dataset consistent, it likely captures only a portion of the broader state-level policy picture.

HIGHLIGHT:

law is also a case study in how difficult it can be to operationalize more sweeping regulation frameworks. In 2025, Colorado attempted to enact amendments narrowing parts of the law but instead opted to push key compliance dates back to mid-2026 to allow for additional time to consider revisions. Texas followed a different path with the Responsible Artificial Intelligence Governance Act (HB 149), passed in 2025 and effective January 2026. While originally touted as the most all-encompassing AI legislation, the final version was significantly scaled back from the original proposal, removing most private-sector obligations and focusing on uses such as behavioral manipulation and the production of child sexual abuse material.

Several states have focused on regulating how AI chatbots interact with consumers, particularly in sensitive settings. Utah's HB 452, signed in March 2025, addresses mental health chatbots and requires disclosure when users are interacting with AI, prohibits the selling or sharing of personal health data with third parties, and restricts in-chat advertising. California's SB 243, effective January 2026, requires companion chatbot operators to disclose their AI nature and implement safety protocols related to suicidal ideation, with additional safeguards for minors. Other states, such as Hawaii (SB 640) and Massachusetts (S.243), have proposed treating undisclosed chatbot interactions as unfair and deceptive practices.

Watermarking and provenance requirements have also gained traction. Washington (HB 1170) requires large providers to include provenance data on AI-generated or materially altered media. Illinois (SB 1929) and Florida (HB 369) proposed similar measures, following California's AI Transparency Act (SB 942), which mandated that large generative AI tools offer watermarking and detection tools at no cost.

However, not all states have moved toward greater oversight. In Montana, SB 212 was signed in April 2025 and established the first state-level "right to compute," affirming individuals' and businesses' rights to own and use computational resources, including AI tools, for lawful purposes. The Montana law limits government restrictions to those that are "demonstrably necessary and narrowly tailored to fulfill a compelling government interest," while also requiring deployers of AI-controlled critical infrastructure to maintain risk management policies with human override capabilities.

In December 2025, the White House issued an executive order titled "Ensuring a National Policy Framework for Artificial Intelligence," which directed the Department of Justice to establish an AI Litigation Task Force to challenge state AI laws in court, instructed the Department of Commerce to identify state laws it considers overly burdensome, and tied some federal funding to states' willingness to avoid enacting conflicting AI legislation. The order carved out certain areas state legislatures can oversee, including child safety, data center infrastructure, and state government procurement. The upshot is that the future of U.S. state-level regulation on AI remains uncertain.

US Congressional Hearings

Congressional attention to AI, as measured by the number of witnesses appearing in AI-related hearings, has increased by almost twentyfold since 2017 (Figure 8.4.7). That growth accelerated after 2022, consistent with the mainstream emergence of generative AI tools in late 2022. Witness counts rose from 18 in 2022 to 131 in 2023 and remained high, at 102, in 2025.

The composition of those witnesses has shifted over time (Figure 8.4.8). Industry's share of witnesses rose from 13% in the 115th Congress to 37% in the 119th, making it the largest witness group in the data. This

increase is consistent with the sector's expanding role in overall AI development. As discussed in Chapters 1 and 4, private companies now account for the majority of frontier model releases and infrastructure investment, which may position them both as more relevant sources of technical input and as more active participants in shaping the policy environment in which they operate. Over the same period, the share of government witnesses fell from 35% to 10%, and academia's share declined from 26% to 15%. The "other" category, which includes civil society and nonprofit organizations, grew from 26% to 38%.

Number of witnesses in US congressional AI-related hearings, 2017–25

Source: AI Index, 2026 | Chart: 2026 AI Index report

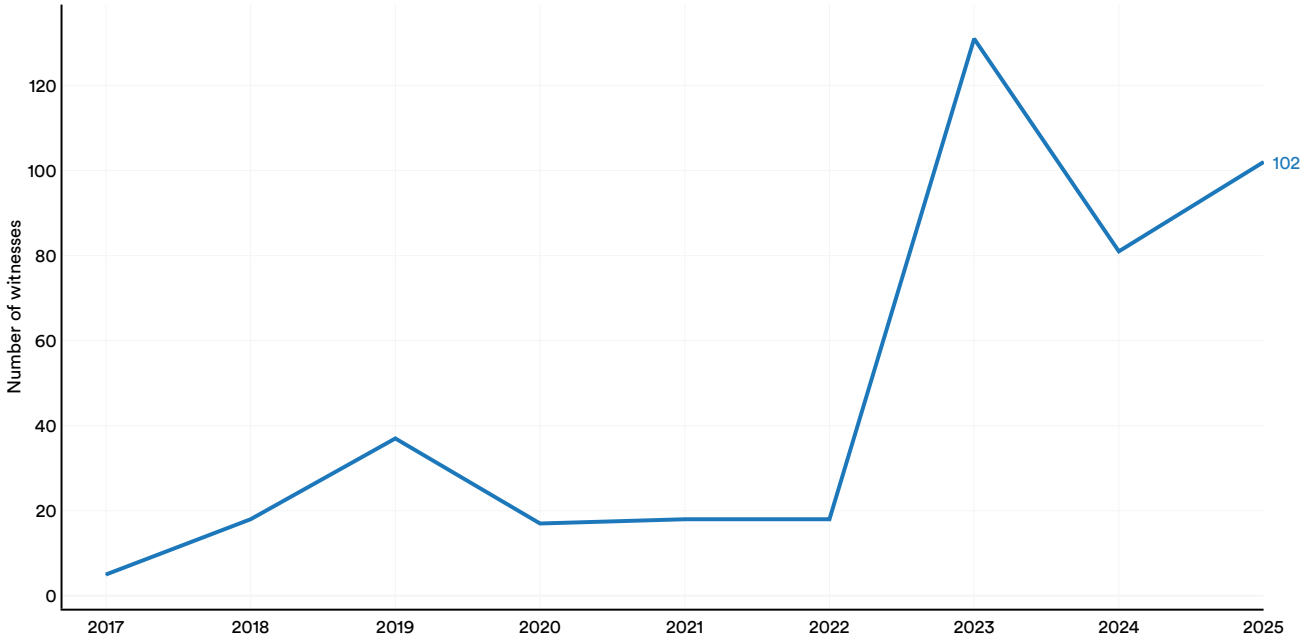


Figure 8.4.7

Witnesses (% of total) in US congressional AI-related hearings by sector, 2017–25

Source: AI Index, 2026 | Chart: 2026 AI Index report

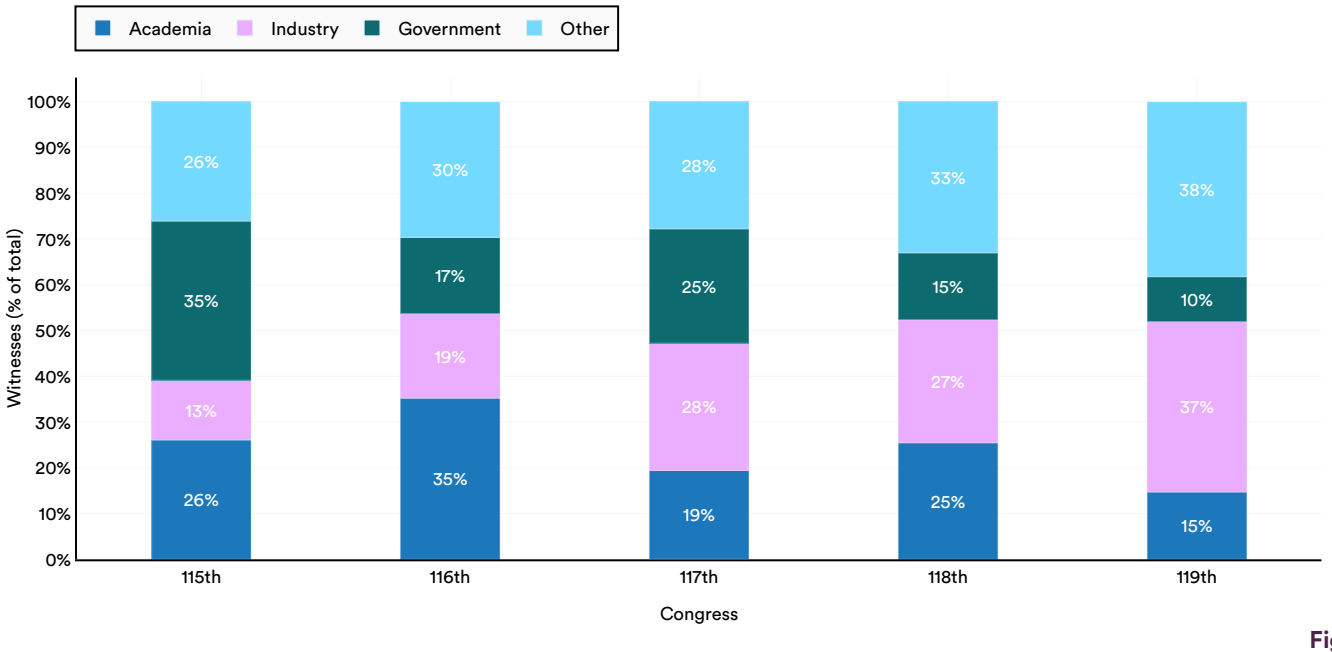


Figure 8.4.8

Across both the House and the Senate, general AI governance and national security and defense drew the most witnesses between 2017 and 2025, with 113 and 74 total witnesses, respectively (Figure 8.4.9). Overall, the House has been more active than the Senate in most subject areas, including finance and economic policy (36 versus 3 witnesses) and national security (49 versus 25). Health and biomedical AI was the only area where both chambers show the same level of activity (9 witnesses each), suggesting comparable engagement in this domain.

Number of witnesses in US congressional AI-related hearings by subject area, 2017–25

Source: AI Index, 2026 | Chart: 2026 AI Index report

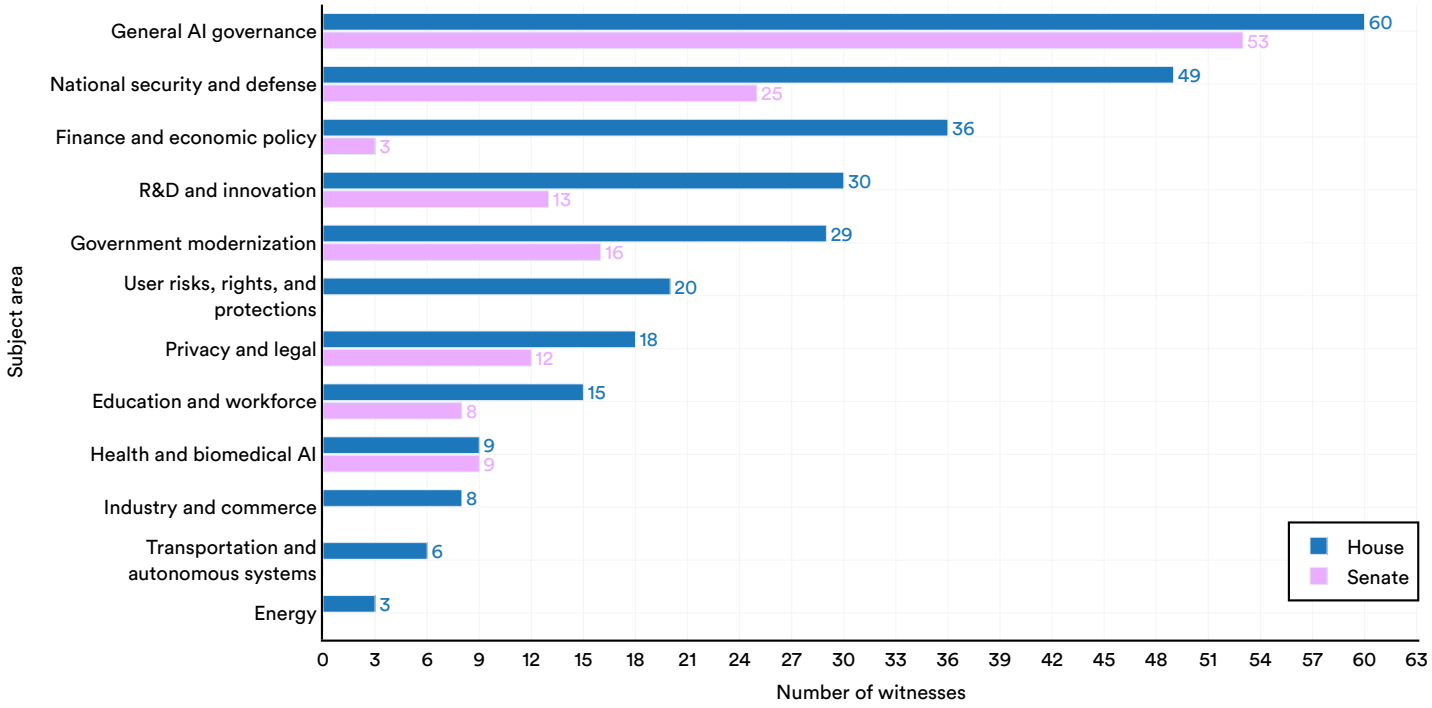


Figure 8.4.9

US Regulations

Federal regulatory activity on AI has grown in recent years, with the number of AI-related regulations increasing from one recorded action in 2016 to 58 in 2025 (Figure 8.4.10). Similar to witness counts, the sharpest increase came after 2022, and the pace has remained steady through 2025, with 58 AI-related regulations.

The direction of federal AI policy changed in early 2025 when the Donald Trump administration issued the Initial Rescissions of Harmful Executive Orders and Actions, which revoked a range of executive actions, including the Biden administration's Executive Order 14110, a framework for safe, secure, and trustworthy AI development and use. That Biden order had anchored a more precautionary federal approach that included reporting requirements for advanced models, guidance on watermarking AI-generated content, and initiatives addressing privacy, civil rights, and workforce impacts. Its reversal was followed by a new executive order, "Removing Barriers to American Leadership in Artificial Intelligence," which reoriented federal policy toward reducing regulatory constraints and promoting innovation.

Number of AI-related regulations in the United States, 2016–25

Source: AI Index, 2026 | Chart: 2026 AI Index report

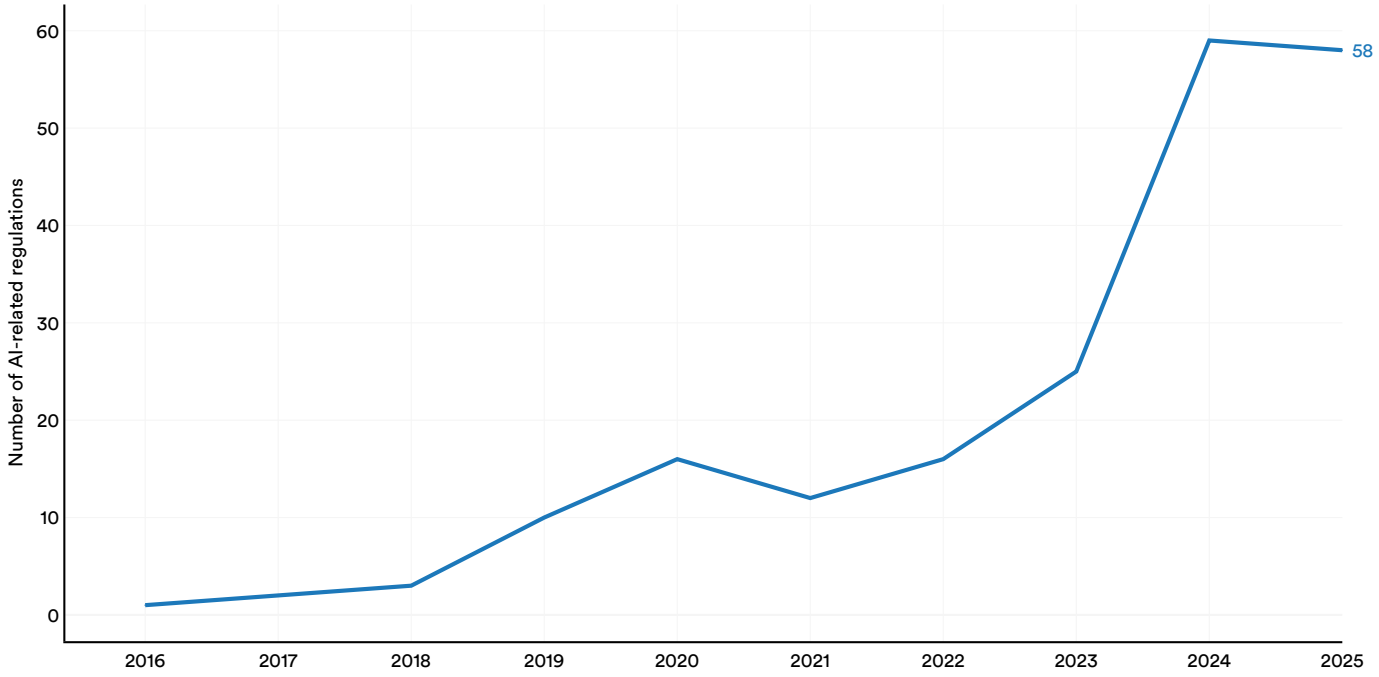


Figure 8.4.10

By Agency

The increasing number of AI-related regulations has been driven by a wide set of federal agencies (Figure 8.4.11). The Executive Office of the President has been the most active, issuing regulatory actions every year since 2016 and putting out 28 in 2025 alone. The Commerce Department and the Industry and Security Bureau have also become more active in recent years, consistent with growing attention to export controls and AI supply chain policy. Several agencies, including the Department of Energy, the Department of Education, and the Securities and Exchange Commission, began issuing AI-related regulations in 2023 or later.

Number of AI-related regulations in the United States by agency, 2016–25

Source: AI Index, 2026 | Chart: 2026 AI Index report

Figure 8.4.11

HIGHLIGHT:

A Closer Look at US Federal Regulations

The following section highlights AI-related regulations enacted through federal rules and executive orders during 2025.

Agency	Regulation	Description
Commerce Department; Industry and Security Bureau	Framework for Artificial Intelligence Diffusion	Prior to its rescission by the Trump administration in May 2025, this rule updated U.S. export controls for advanced computing items and certain AI model weights. It created a new classification for specified advanced "closed-weight" AI model weights and revised licensing requirements and review policies for advanced computing integrated circuits and related items. It also expanded and added license exceptions for certain destinations and uses, updated notification procedures, and introduced additional guidance to help identify diversion risks.
Justice Department	Preventing Access to U.S. Sensitive Personal Data and Government-Related Data by Countries of Concern or Covered Persons	This rule implements Executive Order 14117 of February 28, 2024, "Preventing Access to Americans' Bulk Sensitive Personal Data and United States Government-Related Data by Countries of Concern." It prohibits or restricts certain data transactions involving countries of concern or covered persons, focusing on specified transfers of Americans' bulk sensitive personal data and U.S. government–related data. The rule addresses cross-border data transactions that can involve large-scale datasets and establishes limits on when and how such data may be transferred.
Executive Office of the President	Advancing United States Leadership in Artificial Intelligence Infrastructure	This executive order directs the federal government to fast-track the buildout of domestic AI infrastructure—particularly frontier data centers and their supporting energy systems—on federal lands managed by the departments of Defense, Energy, and Interior. It mandates competitive solicitations for private-sector leases on federal sites, paired with requirements for clean energy procurement, robust cybersecurity standards, and high labor practices. The order also streamlines permitting processes, addresses grid interconnection challenges, and calls for international engagement to promote trusted AI infrastructure among U.S. allies, all with the overarching goal of ensuring the United States maintains leadership in frontier AI development.
Executive Office of the President	Removing Barriers to American Leadership in Artificial Intelligence	This executive order sets the foundational U.S. policy of maintaining global AI dominance by dismantling regulations seen as obstacles to innovation. Most notably, it replaces the Biden administration's 2023 AI executive order on safe and trustworthy AI development and directs agencies to suspend or rescind any actions taken under the earlier order that conflict with the new policy. It also mandates the development of a comprehensive AI Action Plan within 180 days, and requires the Office of Management and Budget to revise existing AI-related guidance memoranda to align with the administration's pro-innovation, minimal-regulation approach.
Executive Office of the President	Ensuring a National Policy Framework for Artificial Intelligence	This executive order establishes a national AI policy framework to prevent a fragmented patchwork of state regulations from hindering U.S. innovation and global competitiveness. It creates an AI Litigation Task Force under the Attorney General to challenge state AI laws considered overly burdensome or unconstitutional. It also directs federal agencies to evaluate problematic state laws, potentially withhold federal funding from noncompliant states, and develop a uniform federal standard that preempts conflicting state regulations—while preserving state authority over child safety, data centers, and government AI procurement.

HIGHLIGHT:

Executive Office of the President	Advancing Artificial Intelligence Education for American Youth	This executive order advances artificial intelligence education for American youth by directing the federal government to expand early exposure to AI concepts, integrate AI appropriately into classrooms, and build an AI-ready workforce. It establishes a White House Task Force on AI Education, led by the Office of Science and Technology Policy, to coordinate agency efforts and create a Presidential Artificial Intelligence Challenge that highlights student and educator achievements. The order also prioritizes educator training and research on AI in education, including the use of existing grant programs to support professional development and AI-enabled tools that improve teaching and learning outcomes.
Executive Office of the President	Promoting the Export of the American AI Technology Stack	This executive order launches a coordinated federal initiative to promote the export of "full-stack" American AI technology packages. These packages combine AI-optimized hardware, cloud and networking infrastructure, data pipelines, models, security measures, and targeted applications for selected partner countries and regions. It directs the Department of Commerce to solicit and evaluate proposals from industry-led consortia, designate priority AI export packages, and support them by streamlining access to federal diplomatic and financing tools. The order frames these efforts as essential to sustaining U.S. leadership in AI and reducing global reliance on AI technologies developed by adversaries.

8.5 Public Investment in AI

Public spending on AI reflects how governments are translating national strategies and policy commitments into resource allocation. This section tracks government AI spending across the United States and several European countries, drawing on public contract data in Europe and the U.K., and on contract, grant, and Other Transaction Agreement (OTA) data in the United States.[7] Grant-level data is included for the United States but is not systematically available for European countries and is therefore excluded from the European analysis.

The methodology differs across regions due to differences in data availability. In Europe and the U.K., long-term instruments like Framework Agreements and Dynamic Purchasing Systems[8] typically report maximum contract ceilings rather than actual spending, and award duration data is often incomplete. Therefore, European and U.S. results are presented separately. For the United States, where transaction-level obligation data is available, the AI Index estimates investment by aggregating only those obligations that occur after AI-related activity first appears in an awarded procedure, while controlling for early de-obligations that could distort trends. This approach preserves time patterns while reducing the risk of overstating historical AI investment.

Total AI Public Investments

Public spending on AI-related contracts has grown across both the United States and the European countries tracked, though the pace and composition of spending vary by country.

United States

Between 2013 and 2024, the United States invested approximately $20.5 billion toward AI-related activities, made up of $15.9 billion in grants, $3.9 billion in contracts, and $650 million in Other Transaction Agreements (Figure 8.5.1). Since 2020, AI-related grant spending has accelerated compared to contracts and OTAs. In 2024, grants accounted for $5.1 billion, 32% of their cumulative total since 2013 (Figure 8.5.2).

Award volume follows a similar pattern. Grants account for the majority of AI-related awards, with 22,364 compared to 3,347 contracts and 185 OTAs (Figure 8.5.3). Despite their lower volume, OTAs have a median contract value of almost $1 million, far higher than grants ($304,000) and contracts ($150,000).

7 European contract data is drawn from Tenders Electronic Daily (TED). U.K. data is sourced from TED, Find a Tender, Contracts Finder, and its archive. Scotland and Wales spending data is accessed through procurement APIs and the Open Contracting Partnership's data registry via Kingfisher Collect; Northern Ireland is excluded due to the absence of an API. U.S. contract, grant, and OTA data is drawn from the Federal Procurement Data System (FPDS) API.

8 Framework Agreements and Dynamic Purchasing Systems are two types of multiyear umbrella buying arrangements. A Framework Agreement sets pre-agreed terms and a maximum budget for future purchases, while a Dynamic Purchasing System is a flexible, open list of approved suppliers used for competitions and orders over time.

Cumulative public spending on AI in the United States, 2013–24

Source: AI Index, 2026 | Chart: 2026 AI Index report

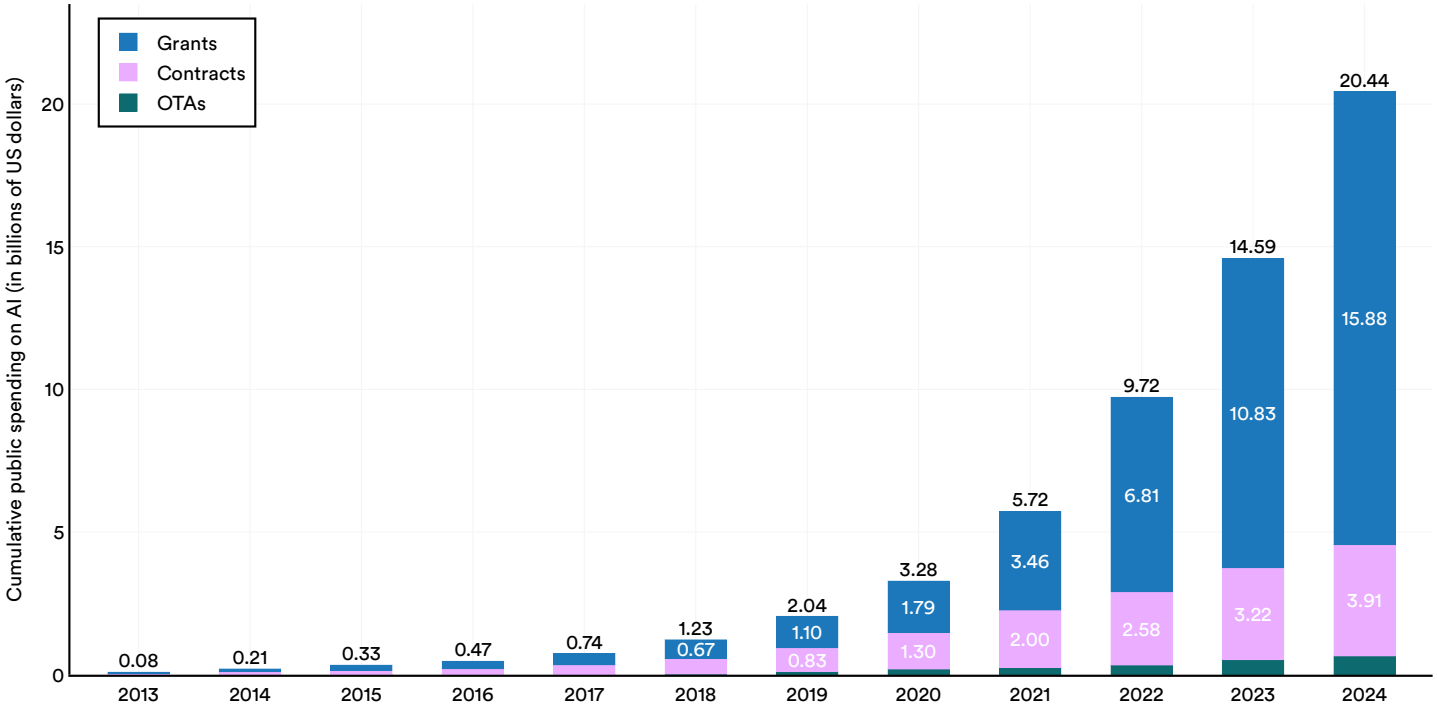


Figure 8.5.1

Public spending on AI in the United States, 2013–24

Source: AI Index, 2026 | Chart: 2026 AI Index report

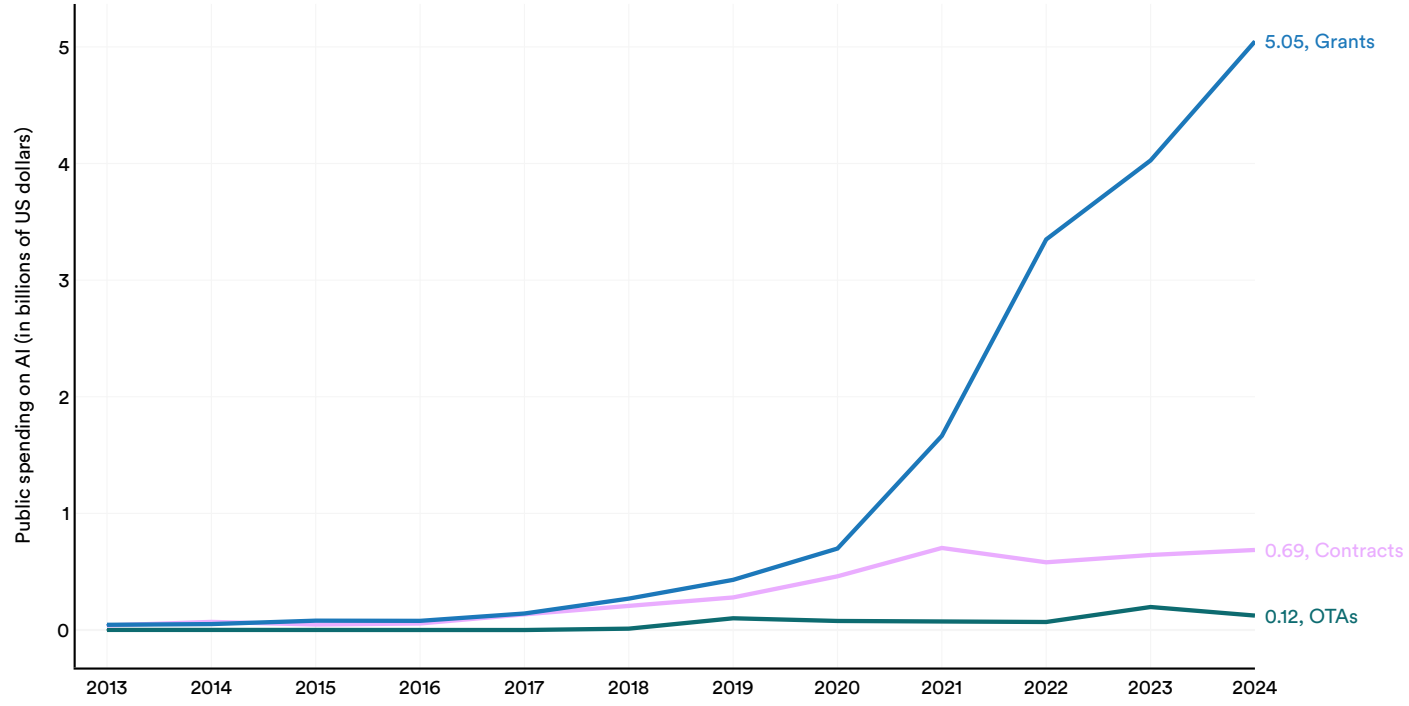


Figure 8.5.2

US AI-related public spending

Source: AI Index, 2026

Statistic	Grants	Contracts	OTAs
Number of awards	22,364	3,347	185
Total (in billions of USD)	15.9	3.9	0.7
Median (in thousands of USD)	304	149.9	999.7
Average (in thousands of USD)	710.1	1,167.9	3,528.8
Total per 100,000 inhabitants (in thousands)	4,728.7	1,172.8	195

Figure 8.5.3

Geographically, U.S. public AI investment through contracts and OTAs is highly concentrated. Virginia[9] received $1.09 billion, California $0.67 billion, and Maryland $0.55 billion; together these states accounted for nearly 60% of total contract and OTA spending between 2013 and 2024 (Figure 8.5.4). AI-related grants have been more broadly dispersed. California ($2.37 billion), Massachusetts ($1.3 billion), and New York ($1.15 billion) received the largest allocation, but these top three accounted for less than 16% of the total (Figure 8.5.5). The geographic concentration in contracts and OTAs may reflect proximity to major federal agencies, while the wider distribution of grants is aligned with the broader institutional footprint of federally funded research.

Public spending on AI via contracts and OTAs in the United States, 2013–24

Source: AI Index, 2026 | Chart: 2026 AI Index report

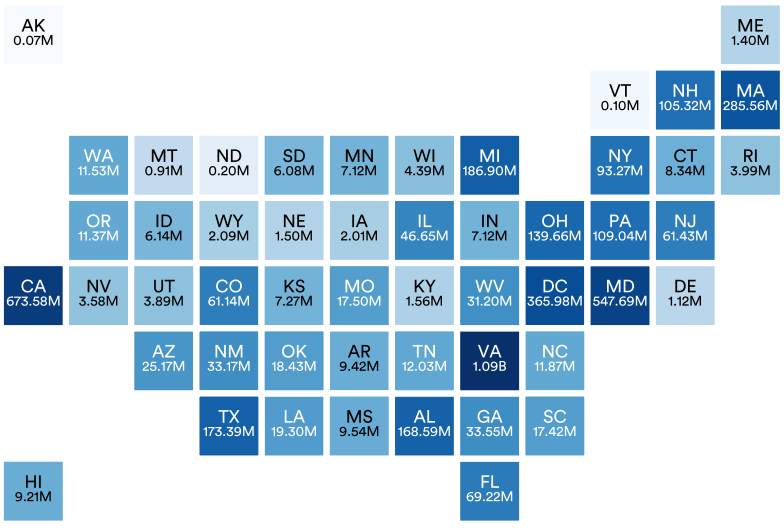


Figure 8.5.4

9 Virginia is home to the headquarters of ECS, the top contractor by total awarded value via contracts and OTAs in the U.S.

Public spending on AI via grants in the United States, 2013–24
Source: AI Index, 2026 | Chart: 2026 AI Index report

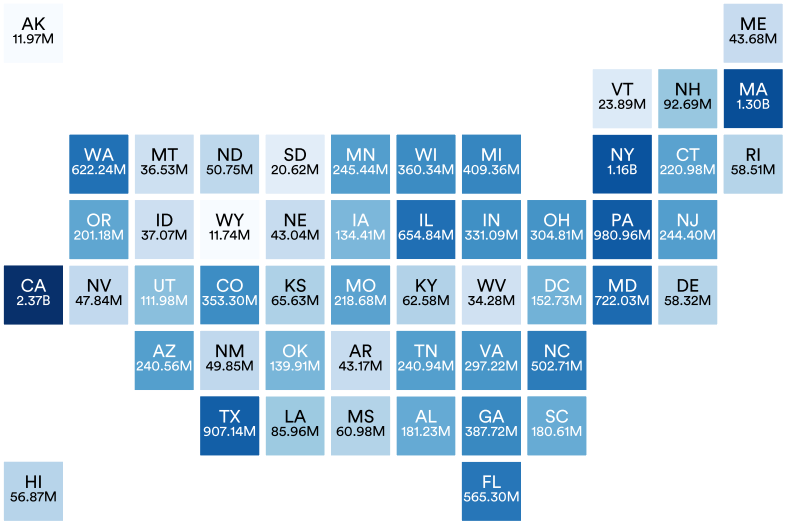


Figure 8.5.5

Spending Across Agencies

In the United States, the Department of Defense led in AI-related contract and OTA spending during 2013–24, accounting for 74.1% of the $810 million total in 2024 and 73% of the total spend ($4.6 billion) across the whole period (Figure 8.5.6). The next largest funders, though significantly smaller, were the Department of the Treasury at 7.2% and the Department of Veterans Affairs at 5.1%. Of the remaining agencies, each represented less than 5% of total spending over the same period.

AI-related grants have been channeled mainly through the Department of Health and Human Services (HHS) — which includes the National Institutes for Health — and the National Science Foundation (NSF) (Figure 8.5.7). By 2024, public AI funding was split evenly across these agencies, with each accounting for roughly 40% of the total. Over time, the NSF consistently received the largest share of AI-related grant funding until there was a steep increase in HHS starting in 2020.

Public spending on AI-related contracts + OTAs (% of total) in the United States by funding agency, 2013–24
Source: AI Index, 2026 | Chart: 2026 AI Index report

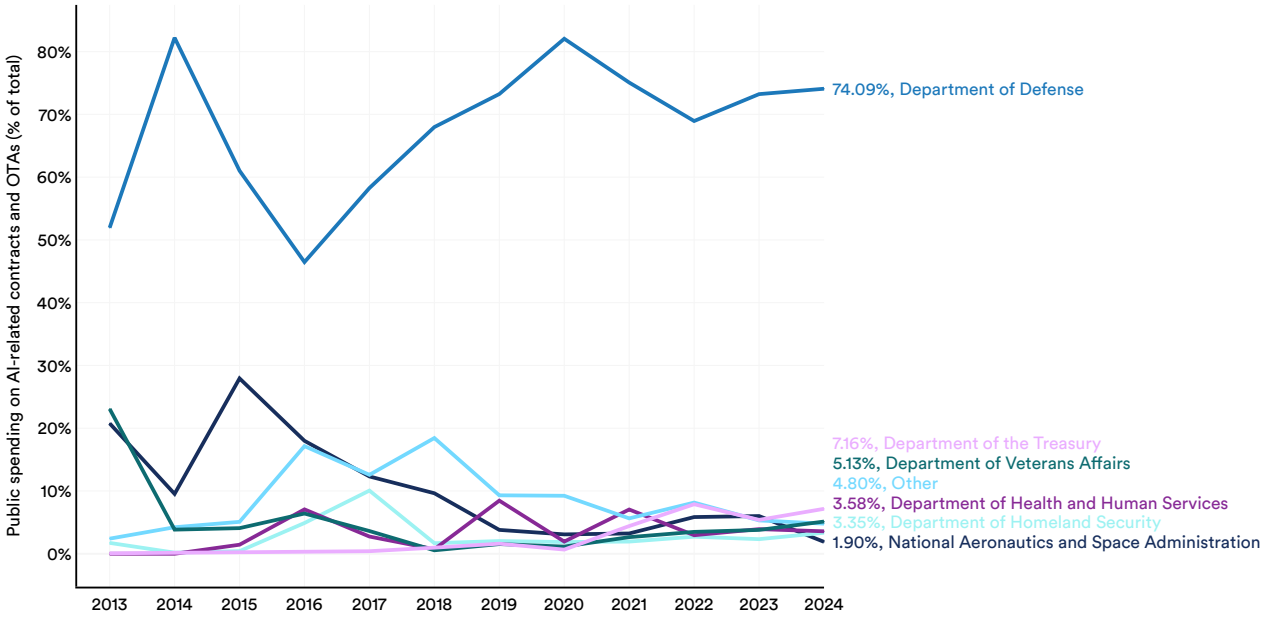


Figure 8.5.6

Public spending on AI-related grants (% of total) in the United States by funding agency, 2013–24

Source: AI Index, 2026 | Chart: 2026 AI Index report

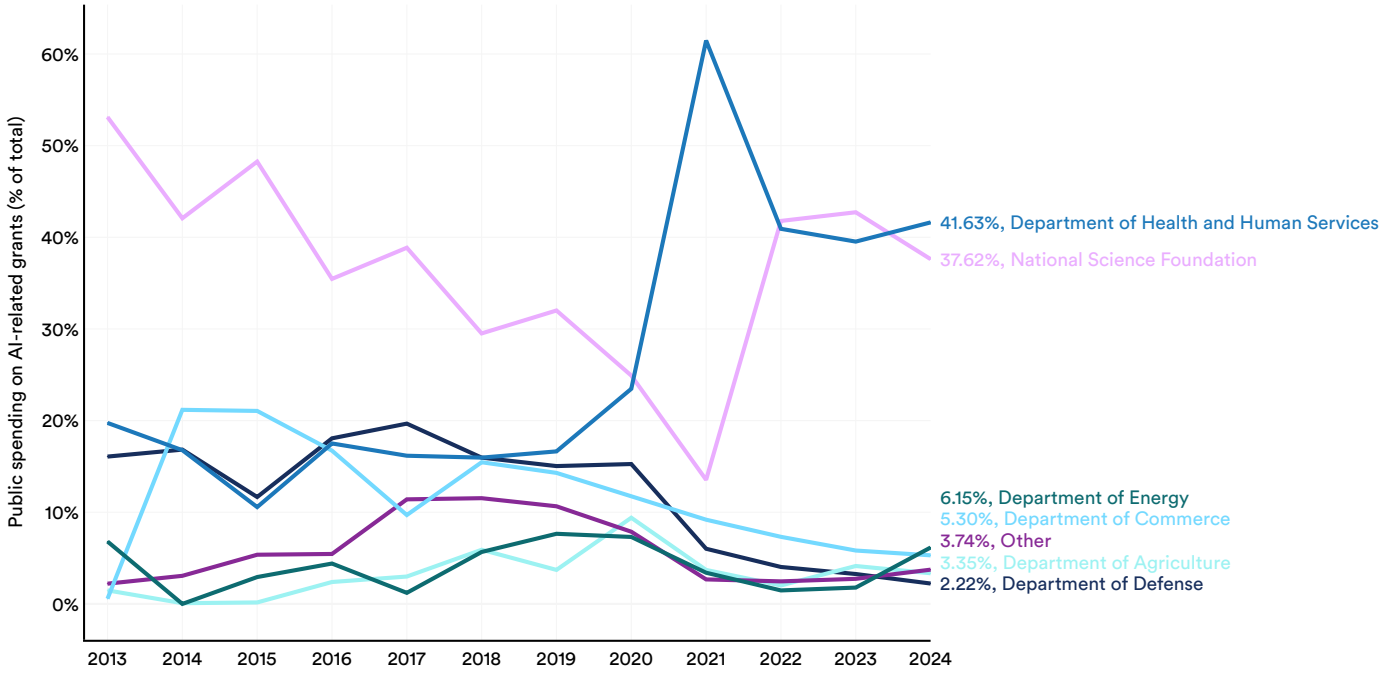


Figure 8.5.7

Europe

European nations collectively committed[10] approximately $3.7 billion in contracts over the 2013–24 period (Figure 8.5.8). The United Kingdom accounted for the largest share, with $1.6 billion, followed by Germany ($505 million) and France ($320 million). In 2024, the U.K.'s AI-related public commitment was $454.4 million, representing 28% of the previous decade's investment. Germany allocated $206.6 million, representing 40% of its total over the same period. Contract volume follows a similar pattern. The U.K. issued the most AI-related contracts with 738, compared to 611 in Germany and 187 in Spain (Figure 8.5.9). However, despite their higher spending and contract volumes, these three countries have a median contract value below $500,000, far lower than smaller European countries such as Denmark (almost $1.1 million) (Figure 8.5.10).

10 The details of U.K. and EU data only allows us to gauge the awarded amounts. Since many AI-related contracts rely on framework agreements or dynamic purchasing systems, there is not clear information about the timeline and total of actual obligations.

Cumulative public spending on AI contracts in European countries, 2013–24

Source: AI Index, 2026 | Chart: 2026 AI Index report

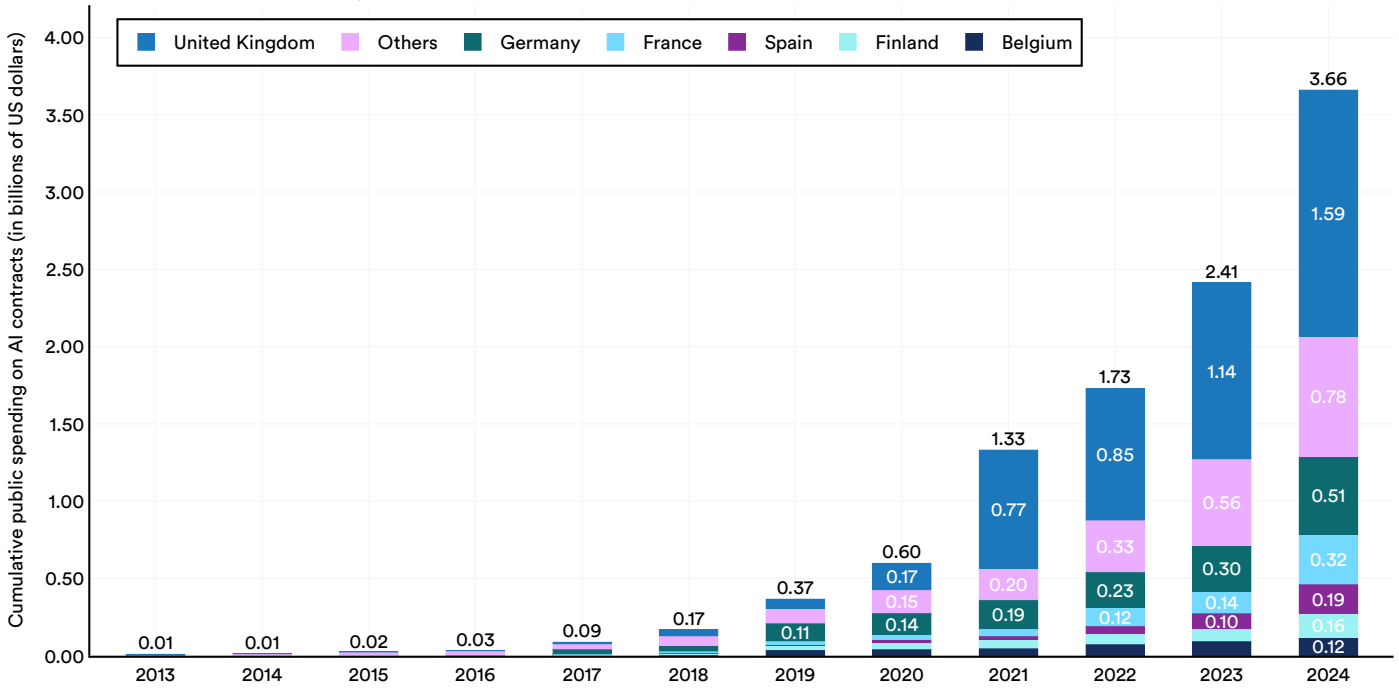


Figure 8.5.8

Number of AI-related contracts in select European countries, 2013–24 (sum)

Source: AI Index, 2026 | Chart: 2026 AI Index report

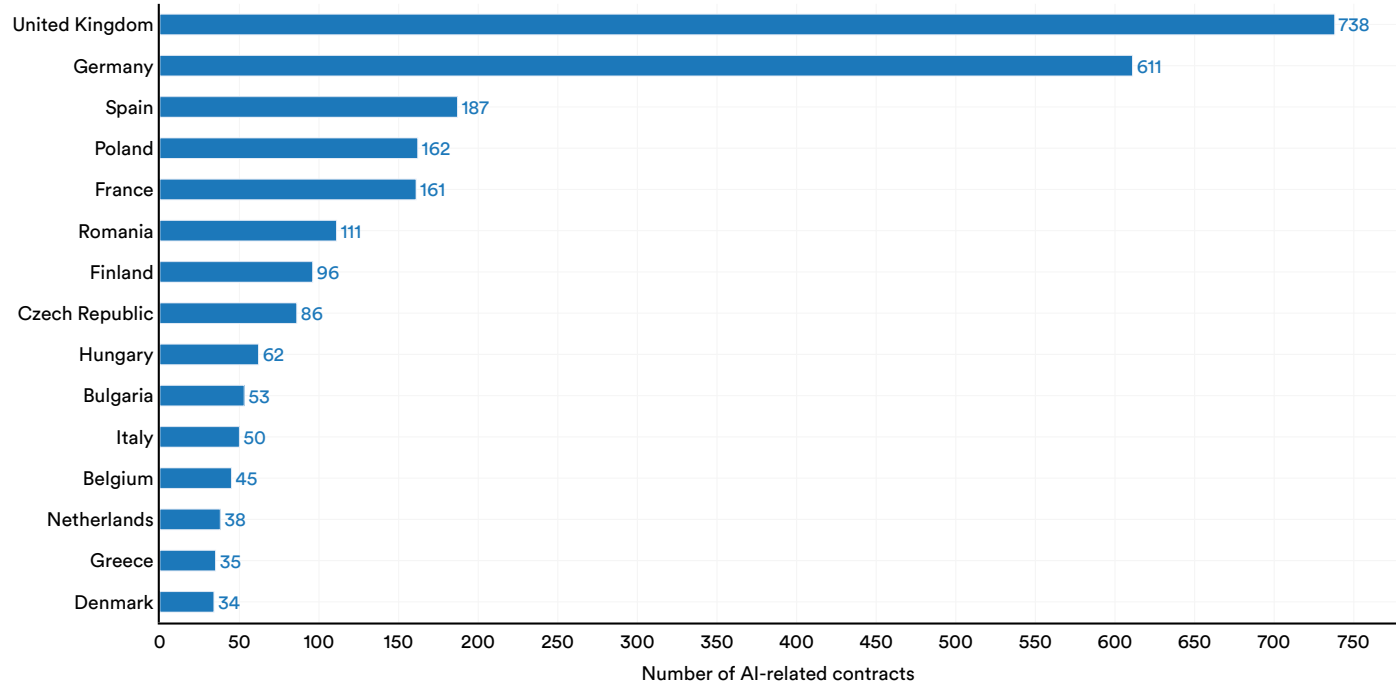


Figure 8.5.9

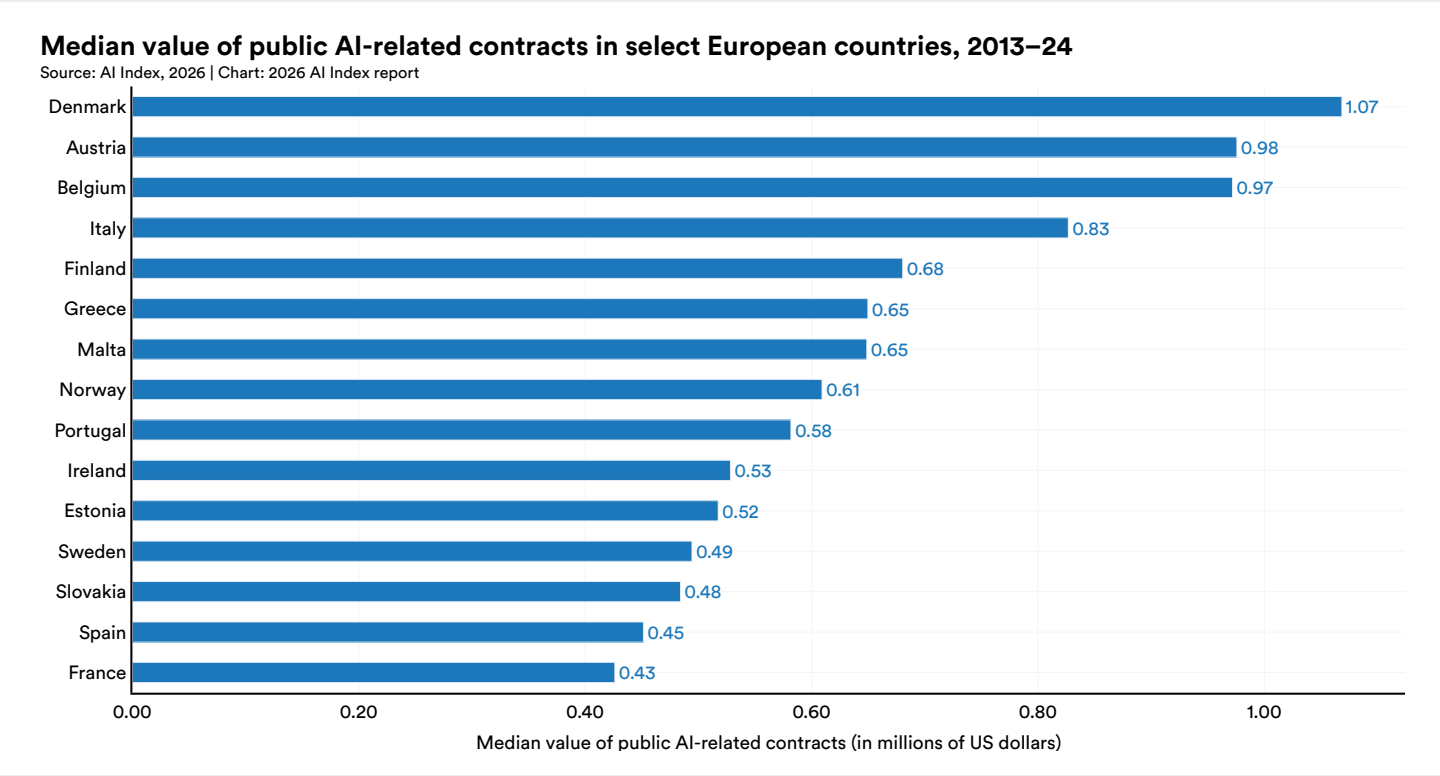


Figure 8.5.10

Spending Across Sectors

In Europe, government bodies accounted for the largest share of AI-related contract spending in 2024, with the "government, national agency, or public authority" category representing 62.6% of the total (Figure 8.5.11). Health accounted for 13.9% of the spend, followed closely by education, which received 13.7%.

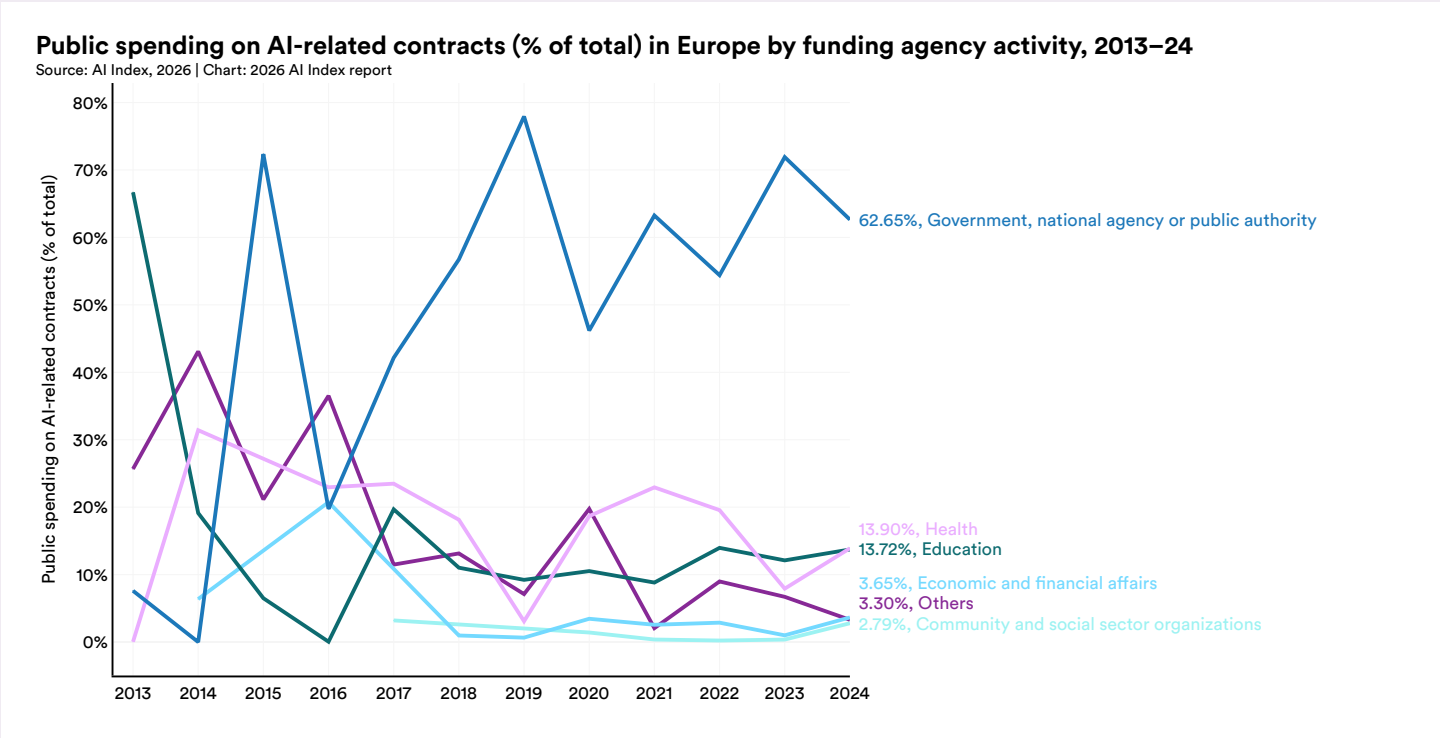


Figure 8.5.11