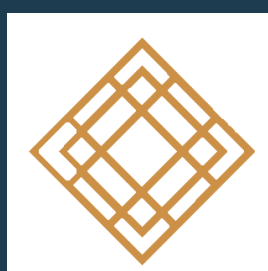




Why is there no AI Safety Law in the United States?



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From Proposals to Enactment: The Procedural Bottleneck in AI Safety Regulation

Introduction

While AI models advance at unprecedented rates, AI safety legislation remains largely symbolic, stalled, or unrealized. Through a year-by-year analysis of AI breakthroughs, U.S. congressional policy proposals, and international legislative enactments, this study identifies a structural gap: the United States is not deficient in AI safety bill proposals but in legislative action, with only 4.23% of U.S. AI bills reaching any terminal outcome. We quantify enactment rates, map U.S. Congressional AI bills across thematic domains, identify procedural bottlenecks, and develop a logistic regression model to test which factors predict legislative stalling.

Methodology

First comprehensive dataset of US AI bills spanning 2017 to August 2025 (150 bills) by aggregating data from Congress.gov.

- Structural causes of AI legislation failure.
- Bill End-Point Categorization:
 - No Action** after the introduction
 - Stalled** in Committee (House/Senate)
 - Declined**
 - Passed**
 - Calendar** Inaction (House/Senate)
 - Expired** without action

Action Rate Metric: as a representative for congressional engagement and legislative momentum.

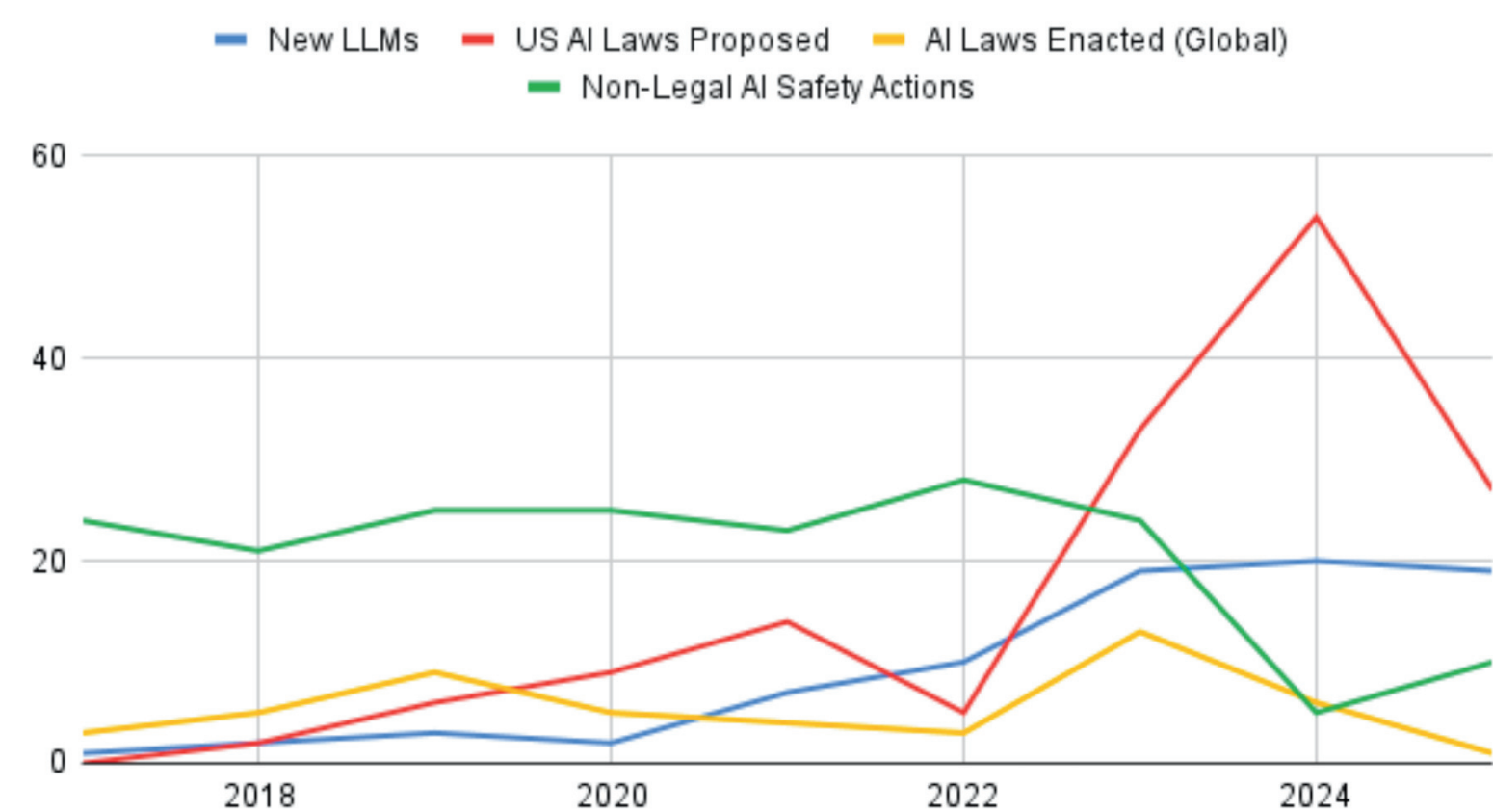
$$\text{Action Rate} = \frac{\text{Passed Bills} + \text{Declined Bills}}{\text{Total Proposed Bills}}$$

Thematic Classification & Penalized Logistic Regression: Defined thematic subfields related to AI and AI Safety (see figure on the right) for each bill.

To identify **stallation** predictors, we expanded the dataset via the Congress.gov API, incorporating chamber origin, sponsor party affiliation, bipartisanship status, and sponsor quantity (12 parameters total).

A penalized logistic regression model with ridge penalty ($C=1.0$, $\text{max_iterations}=100$, $\text{solver}=lbfgs$) was trained using 80/20 train-test splits with bootstrap resampling across 100 iterations. Standard errors and p-values were computed via bootstrap methodology, with statistical significance assessed at $\alpha=0.05$ post Bonferroni correction.

Quantitative comparison of AI legislation vs LLM breakthroughs:



Recommendations

Establish dedicated AI Policy committees to address pigeonholing. If the leadership decides the bill does not fit within its overall agenda, a decision not to act will 'kill' the bill just as effectively as a vote against it. [Reduce Bottlenecks]

Create Independent AI Safety Specialized Agencies empowered to regulate AI systems, audit compliance, and intervene in development when necessary. [Independent Oversight]

Introduce Sunset Clauses to speed up policy enactment. Create mechanisms to proceed without consensus at speed, overcoming analysis/paralysis modes. [Planned Adaptation]

Implement Preemptive Enactment Models. Develop frameworks that would activate automatically when specific risk thresholds are crossed. [Pre-emptive Enactment]

Findings

4.23%

Action Rate for AI-Related Bills

vs.

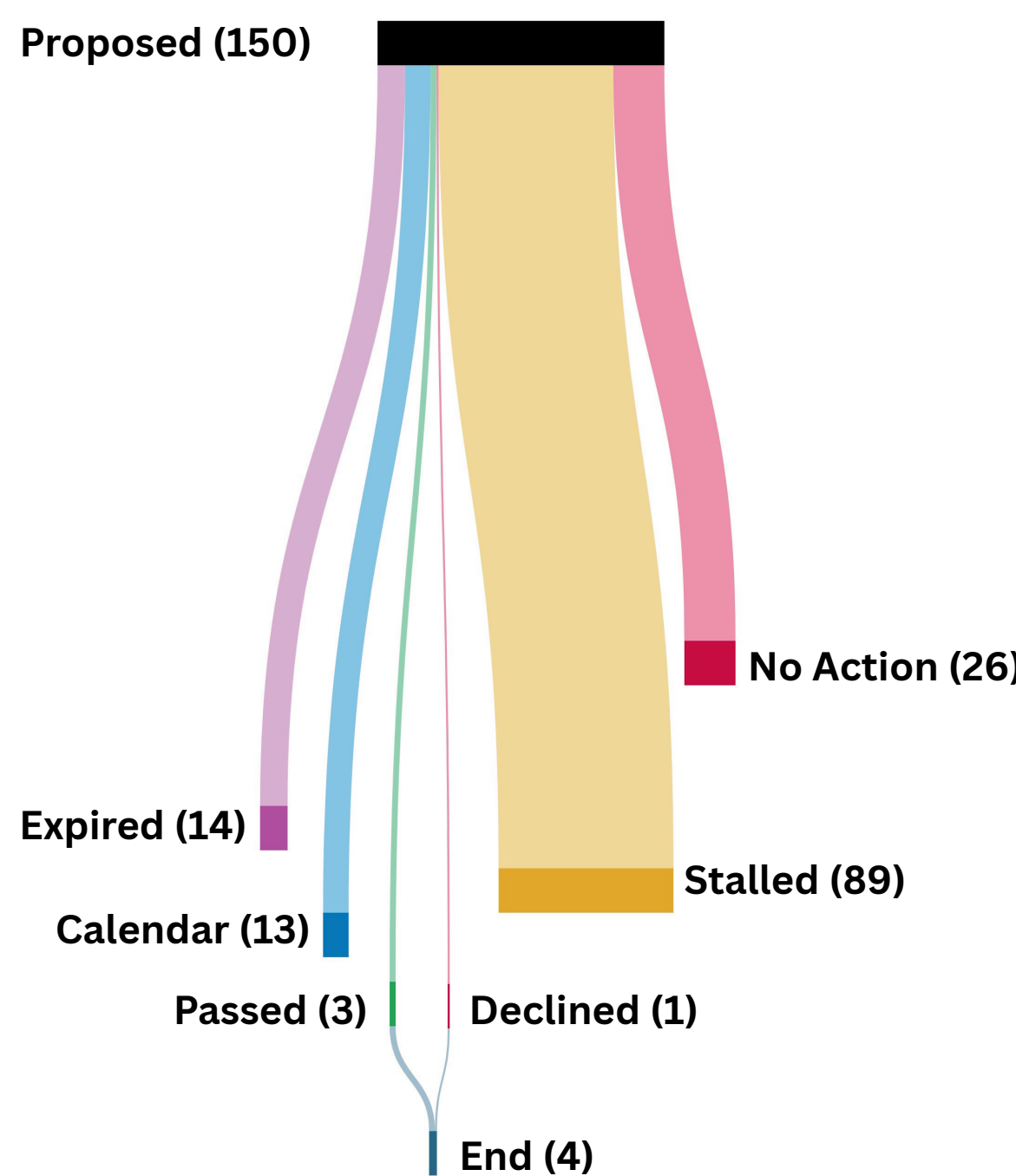
6.25%

Action Rate for all Bills

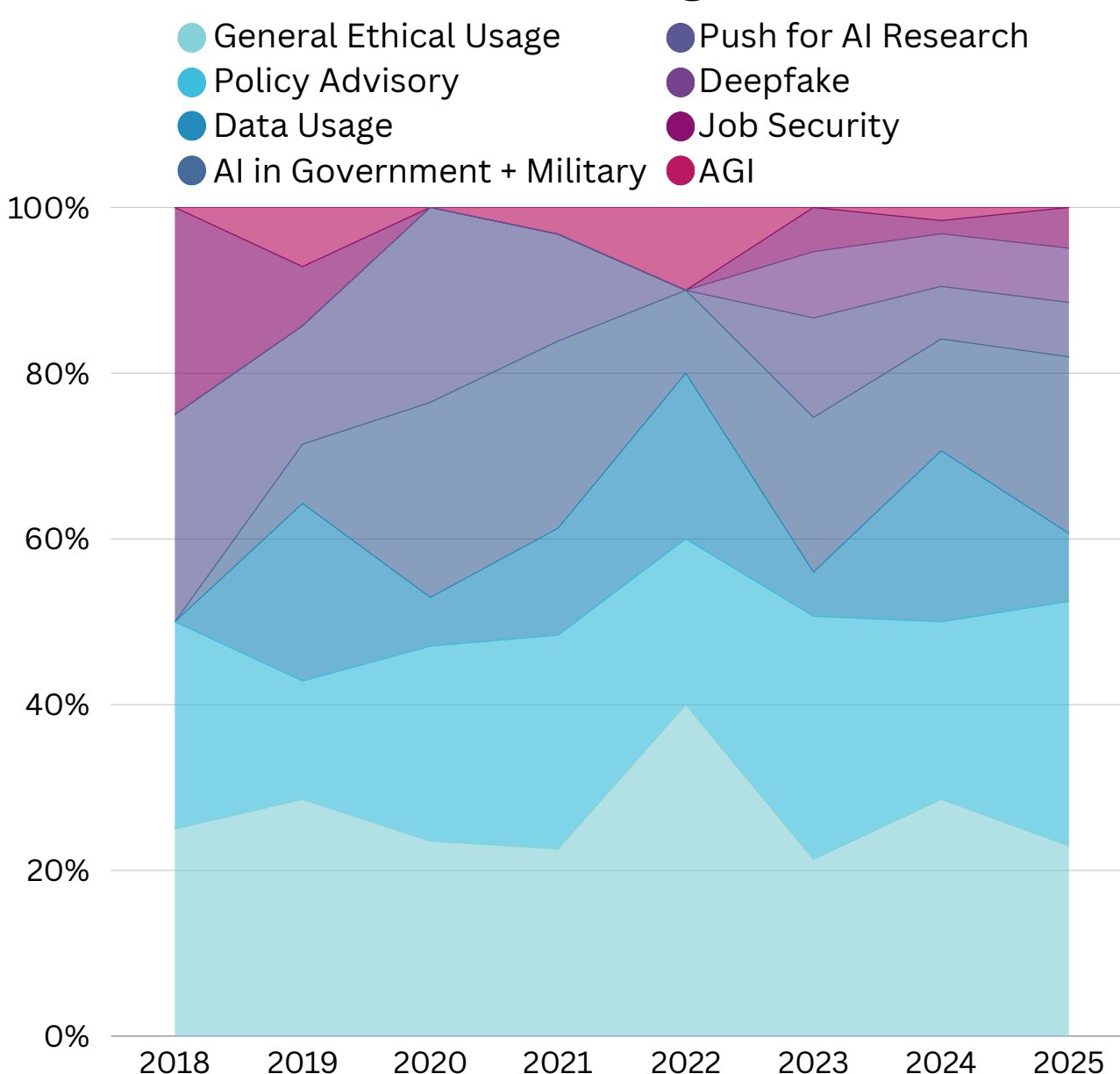


59.3% bills stall in committees
3/150 bills passed none on AI safety

AI Bill Endpoints: AI policies are sent to subcommittees, where they stall, are placed on a calendar, and ignored



Comprehensive taxonomy of AI policy subfields for Bills in United States Congress



Number of sponsors of a bill negatively affects its progress

Feature	Coefficient	P-value
Advanced AI	-0.7662	0.3345
AI in Government	-0.5247	0.3207
Data Usage	-0.1252	0.5006
Deepfake	0.2187	0.5268
General Ethical Usage	0.2292	0.7223
Job Security	-0.3767	0.6633
Push for AI Research	0.3405	0.8283
Policy Advisory	0.2048	0.7516
Bipartisan	-0.3282	0.5680
Chamber_Binary	0.7971	0.1706
Num_Sponsors	0.8068	0.0270
Sponsor_Party_Binary	0.2350	0.6781

Logistic Regression Coefficients

The most significant predictor is the number of sponsors of a bill (coefficient=0.8068 & $p=0.0270$), suggesting that bills with more cosponsors are substantially more likely to stall. This finding aligns with political science literature showing that broader coalition support may increase debate and thereby decrease the likelihood of movement through committees.