

## THE STATE STATUTES PROJECT

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State statutes are having a moment in national debates. Partly fueled by polarization, state legislatures have pushed the boundaries on almost every important national question, from abortion and regulation of social media, all the way to police lawsuits and drug use. Take, for instance, the by now well-known example of Texas Senate Bill 8. To avoid *Roe v. Wade*, the Texas Legislature enacted a statute that allowed private parties (really, anyone) to sue abortion providers. The kicker was that the statute prohibited government enforcement in order to prevent *Ex parte Young* style challenges in federal court. Or take Montana's attempt to ban the use of TikTok within the state. In Senate Bill 419, the Montana Legislature imposed a penalty of \$10,000 for each discrete violation of the statute, including the continued availability of TikTok or downloads of the app in the state. In both of these cases, state legislatures regulated a politically contentious area of law. And this is just the beginning. In an empirical study of state private enforcement, we found that states have added private remedies for harms arising from novel digital technologies, including issues related to privacy, recording devices worn by police officers, broadband accessibility, electronic communications, and online criminal activity.

Notwithstanding the importance of these state statutory developments, scholars have no readily accessible database to conduct empirical research on state statutes. Current databases do not provide granular data on statutory provisions, fail to flag trends in the adoption of new statutes across the states, cannot give fine-grained numbers on how many statutory provisions of a certain type exist, and are simply not optimized for cross-state statutory research. For example, current databases are not useful for researching the number of statutes that provide immunities to local officials, the growth of private rights of action over time, the differences in language between state foreign judgment enforcement statutes, or how states adapt model codes.

This Essay sketches out a vision of an in-progress effort to spur empirical research on state laws. We plan to use large language models (LLMs) to produce an annotated database of state statutes. This database would contain an easily accessible version of all state statutes and, within them, statutory clauses of interest to academics. Each clause would be annotated according to variables that might help researchers across a range of disciplines, including law, political science, and economics. These could include, for instance, whether a clause creates a private right of action, whether it creates an immunity from lawsuits, whether it is a criminal provision derived from a model code, and so on. In this Essay, we

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demonstrate an early application of the State Statutes Project, focusing on provisions that, in one way or another, contain foreign relations ingredients.

Our plan is for the Stanford Neukom Rule of Law Center to publish and host the database with the hope of supporting empirical work on state law. Such a database would hopefully emulate what similar projects have done in other areas, including the Comparative Constitutions Project, which opened up and significantly improved research on constitutional provisions. This Essay describes the goals of the project, its structure, and progress thus far.

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## INTRODUCTION

State statutes are having a moment in national debates. Partly fueled by polarization, state legislatures have pushed the boundaries on almost every important national question, including abortion, the regulation of social media, police lawsuits, and drug use. Take, for instance, the by now well-known example of Texas Senate Bill 8.<sup>1</sup> To avoid *Roe v. Wade*,<sup>2</sup> the Texas Legislature enacted a statute that allowed private parties (really, anyone) to sue abortion providers.<sup>3</sup> The kicker was that

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1. Texas Heartbeat Act, S. 8, 87th Leg., Reg. Sess. (Tex. 2021).

2. 410 U.S. 113 (1973).

3. Tex. S. 8, § 3 (amending chapter 171 of Texas's Health and Safety Code to allow "[a]ny person, other than an officer or employee of a state or local governmental entity in this state, [to] bring a civil action against any person who: (1) performs or

the statute prohibited government enforcement in order to prevent *Ex parte Young*<sup>4</sup> style challenges in federal court.<sup>5</sup> Or take Montana’s attempt to ban the use of TikTok within the state. In Senate Bill 419, the Montana Legislature imposed a penalty of \$10,000 for each discrete violation of the statute, including the continued availability of TikTok or downloads of the app in the state.<sup>6</sup> In both of these cases, state legislatures regulated a politically contentious area of law. But this is just the beginning. In an empirical study of state private enforcement, we found that “states have added private remedies for harms arising from novel digital technologies, including issues related to privacy, recording devices worn by police officers, broadband accessibility, electronic communications, and online criminal activity.”<sup>7</sup>

Notwithstanding the importance of these state statutory developments, scholars have no readily accessible database to conduct empirical research on state statutes. Current databases do not provide granular data on statutory provisions, fail to flag trends in the adoption of new statutes across the states, cannot give fine-grained numbers on how many statutory provisions of a certain type exist, and are simply not optimized for cross-state statutory research.<sup>8</sup> For example, current databases are not useful for researching: the number of statutes that provide immunities to local officials, the growth of private rights of action over time, the differences in language between state foreign judgment enforcement statutes, or how states adopt model codes.<sup>9</sup>

We plan to use large language models (LLMs) to produce an annotated database of state statutes. This database would contain an easily accessible version of all state statutes and, within them, statutory clauses of interest to academics. Each clause would be annotated according to variables that might help researchers across a range of disciplines, including law, political science, and economics. These could include, for

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induces an abortion in violation of this subchapter; (2) knowingly engages in conduct that aids or abets the performance or inducement of an abortion . . . ; or (3) intends to engage in the conduct described by Subdivision (1) or (2)”.

4. 209 U.S. 123 (1908) (allowing federal courts to hear suits for injunctive relief against state officers allegedly violating federal law).

5. Tex. S. 8, § 3 (noting that the requirements imposed by the bill “shall be enforced exclusively through . . . private civil actions,” and that “[n]o enforcement . . . may be taken or threatened by this state, a political subdivision, a district or county attorney, or an executive or administrative officer or employee of this state or a political subdivision against any person”).

6. S. 419, 68th Leg., Reg. Sess. § 1(2) (Mont. 2023); *Alario v. Knudsen*, No. CV 23-56-M-DWM, 2023 WL 8270811, at \*3 (D. Mont. Nov. 30, 2023).

7. Diego A. Zambrano, Neel Guha, Austin Peters & Jeffrey Xia, *Private Enforcement in the States*, 172 U. PA. L. REV. 61, 68 (2023) (footnotes omitted).

8. *See infra* Part I.

9. *See infra* Part I.

instance, whether a clause creates a private right of action, whether it creates an immunity from lawsuits, whether it is a criminal provision derived from a model code, and so on. Our plan is for the Stanford Neukom Rule of Law Center to publish and host the database with the hope of supporting empirical work on state law.<sup>10</sup> Such a database would hopefully emulate what similar projects have done in other areas, including the Comparative Constitutions Project, which opened up and significantly improved research on constitutional provisions.<sup>11</sup>

In this Essay, we demonstrate an early application of the State Statutes Project, focusing on provisions that, in one way or another, contain foreign relations ingredients. By statutes with a foreign ingredient, we mean *any statutory text that implicates foreign countries, foreign individuals, foreign laws, or foreign courts*. Scholars have explored the relationship between state law and foreign countries, including the possibility of state foreign policy,<sup>12</sup> the connection between federalism and foreign affairs,<sup>13</sup> constitutional limits on state lawmaking,<sup>14</sup> procedural doctrines that affect foreign courts,<sup>15</sup> and, more recently, the rise of state laws that target foreign authoritarian countries.<sup>16</sup> In all of these areas, scholars had to meticulously survey state statutory text by hand, painstakingly detailing how state law governs, say, forum non conveniens or whether Chinese citizens can purchase property.<sup>17</sup> Yet, despite their focus, we have only scratched the surface of foreign ingredients in state law.

Applying our methodology, we find around 1,800 distinct clauses with a foreign ingredient across the fifty states. We also find that states have aggressively adopted statutes in three key areas: international

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11. *About the CCP*, COMPAR. CONSTS. PROJECT, <https://comparativeconstitutionsproject.org/about-ccp/> [<https://perma.cc/5R7V-LUJP>].

12. See, e.g., David Freeman Engstrom & Jeremy M. Weinstein, *What if California Had a Foreign Policy? The New Frontier of States' Rights*, WASH. Q., Spring 2018, at 27; Julian G. Ku, *Gubernatorial Foreign Policy*, 115 YALE L.J. 2380 (2006).

13. See, e.g., Howard N. Fenton, III, *The Fallacy of Federalism in Foreign Affairs: State and Local Foreign Policy Trade Restrictions*, 13 NW. J. INT'L L. & BUS. 563 (1993); John C. Yoo, *Foreign Affairs Federalism and the Separation of Powers*, 46 VILL. L. REV. 1341 (2001).

14. See, e.g., Michael D. Ramsey, *The Power of the States in Foreign Affairs: The Original Understanding of Foreign Policy Federalism*, 75 NOTRE DAME L. REV. 341 (1999).

15. William S. Dodge, Maggie Gardner & Christopher A. Whytock, *The Many State Doctrines of Forum Non Conveniens*, 72 DUKE L.J. 1163 (2023).

16. Matthew S. Erie, *Property as National Security*, 2024 WIS. L. REV. 255.

17. See Dodge, Gardner & Whytock, *supra* note 15, at 1174–77; Erie, *supra* note 16, at 285–86, 285 n.164.

economic promotion, anti-boycotts of particular nations, and prohibiting foreign law in state courts. Because of our empirical approach, we can specifically quantify the prevalence of these statutes. We find 553 distinct statutory sections across 50 states describing the creation of state offices, departments, corporations, or entities tasked with promoting the state's economic interests abroad. In a more symbolic area of state law, we find 78 distinct enactments (across 36 states) that prevent public entities from contracting or purchasing services from companies engaged in boycotts of certain countries, and/or instruct public officials to divest from these companies. Finally, we find 64 distinct enactments (across 43 states) that limit a state's courts from enforcing foreign laws or judgements.

Setting aside these three areas, we also discovered more esoteric zones of state foreign relations. Take, for instance, the fact that Sudan appears in more than fifty state statutes, mostly related to divestment efforts after the war in Darfur.<sup>18</sup> Or consider a California statute that provides:

Upon passage of a federal law . . . imposing sanctions on the government of Turkey for failure to officially acknowledge its responsibility for the Armenian Genocide, [a California pension] board shall not make additional or new investments or renew existing investments of public employee retirement funds in any investment vehicle in the government of Turkey . . . .<sup>19</sup>

Consider this outlandish example: In 2001, Oklahoma adopted the Compete with Canada Film Act<sup>20</sup> to incentivize “those in Hollywood to create more of their films in Oklahoma” rather than Canada.<sup>21</sup> These examples show how states attempt to intervene in foreign relations in ways that are unexpected to outside researchers.

In general, our goal is to make state statutory research much easier. We seek to share our current efforts to use a large language model to fill the need for more empirical research on state law and outline future directions for work.

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18. This figure comes from our analysis. These statutes appear to relate to the humanitarian crisis in Sudan in the early 2000s. *See, e.g.*, Press Release, Rod R. Blagojevich, Ill. Governor, Gov. Blagojevich Signs Law Prohibiting Illinois Pension Funds from Investing in Companies that Are Associated with the Republic of Sudan (Aug. 28, 2007), <https://www.illinois.gov/news/press-release.6244.html> [<https://perma.cc/C5HH-JPUP>] (noting that fifteen states took varying actions to divest from Sudan).

19. CAL. GOV'T CODE § 7513.74(b) (West 2024).

20. OKLA. STAT. ANN. tit. 68, §§ 3621–3626 (West 2024).

21. *See* Press Release, Keith Leftwich, Oklahoma State Sen., Film Incentive Bill Signed into Law (May 24, 2001, 1:23 AM), <https://oksenate.gov/press-releases/film-incentive-bill-signed-law> [<https://perma.cc/9ZCE-KSUY>].

I. CURRENT LIMITATIONS IN THE STUDY OF STATE  
STATUTORY TEXT

We begin with an uncontroversial proposition: Legal scholars often write about the latest developments in state law. Whether it is to explore tort reform, constitutional protections for education, or civil procedure, scholars typically make general claims about trends in state law. To do so, scholars rely on surveys of all state statutes in a particular area or, unfortunately, must generalize based on a few examples. If a scholar is lucky, they might draw from a pre-existing fifty-state survey. Perhaps the most comprehensive database of this kind, Westlaw's "50 State Statutory Surveys" categorizes different statutory provisions, including in areas like Artificial Intelligence, Bankruptcy, Blue Sky Laws, Business Organizations, and Criminal Laws.<sup>22</sup> But if there is no existing fifty-state survey, then a scholar must start from scratch.

When researchers are forced to conduct a fifty-state survey from scratch, they face a host of limitations. First, there is no single open database that contains all state laws in a navigable way. States simply do not provide easily accessible versions of their state codes. And, even when they do, they force researchers to use keywords to find specific provisions in PDF documents. But the problem is that *ex ante* researchers often do not know the exact language of the statutory text they are searching. Take, for instance, our previous effort to study private rights of action in state law.<sup>23</sup> There was no single keyword that we could enter into Westlaw or Lexis to begin that search. Moreover, when we enter terms like "private right of action," current databases often limit results by showing hits of "10,000+." That same process applies to researching almost every area of state law. As we've explained in previous work, Westlaw and Lexis are not optimized for quantitative research on state statutes:

In particular, the use of [Westlaw and Lexis] creates two measurement problems due to their lack of transparency. One is a problem of aggregation. In short, we are not sure what the unit of analysis is when [researching a particular provision in state laws]. It's possible, for instance, that search engines

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22. *50 State Statutory Surveys*, WESTLAW, <https://1.next.westlaw.com/Browse/Home/SecondarySources/50StateSurveys/50StateStatutorySurveys> (from the Westlaw homepage, follow "Secondary Sources" hyperlink, then follow "50 State Surveys" hyperlink, then follow "50 State Statutory Surveys" hyperlink).

23. Zambrano, Guha, Peters & Xia, *supra* note 7.

intentionally limit the number of results displayed for queries with numerous results. Additionally, search results will only return documents that contain language matched by the query. If a document corresponds to a section of a state code—which may contain numerous [statutory provisions] spanning different types of claims—that document will only be counted as a single [provision]. Second, and most importantly, the number of results returned by this method is highly dependent on the actual queries constructed, and we do not know the search terms used in the query.<sup>24</sup>

Second, even when a researcher has some idea of the relevant language in state law, they are forced to parse enormous amounts of text with the help of research assistants. So, for instance, Matthew Erie recently wrote about the expansion of state laws that target Chinese citizens.<sup>25</sup> He knew *ex ante* that state statutes would probably mention the words “China” or “Chinese,” so he was able to instruct research assistants to search on Westlaw and catalogue the presence of these words in proposed state bills.<sup>26</sup> He describes his research methods as follows:

Searches were conducted in both Legiscan and Westlaw to confirm that all known bills were identified. Key terms consisted of “China,” “Chinese,” “foreign adversary,” and “restricted foreign entity.” The search is up to date as of October 14, 2023. While the database captures a snapshot of legislative activity, due to the quickly evolving nature of the legislation, the database is inevitably outdated.<sup>27</sup>

This is the best possible research that one could perform with current databases. But, as Erie mentions, it is difficult to keep up to date.<sup>28</sup> And such a method does not allow the researcher to discover new ways of targeting Chinese entities. Suppose that states have figured out that instead of mentioning “China,” they can refer to foreign state-owned entities. Erie’s method would fail to capture those bills.

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24. Zambrano, Guha, Peters & Xia, *supra* note 7, at 143.

25. Erie, *supra* note 16.

26. *Id.* at 286 n.164.

27. *Id.*

28. *Id.*

## II. OUR PROPOSED STATE STATUTES PROJECT

We present our proposal for the State Statutes Project—an effort to encourage greater empirical scholarship on state law by making available a comprehensive database of state statutes, where statutes are labeled according to variables of interest to legal scholars. We begin with two notable aspects of the project: First, we believe that modern machine learning techniques (namely, large language models) can be used to semi-automate annotation cheaply and accurately. Second, we hope to incorporate multiple researchers into the process of building this database and would like to invite other scholars to participate in the project by identifying variables that the database should include.

### A. *What Will the Database Contain?*

The database will contain the fifty state codes, subdivided into statutes. (We currently have access to decades of state codes but due to contractual restrictions cannot yet make them available to other researchers.) In order to build a more accessible database, we plan to collect statutory text directly from state legislature websites. The initial version of the database would contain only the most recent version of state codes. However, if the project is successful, we hope to augment the database with historic state codes, thus enabling scholars to study trends over time.

Statutes in the database would be coded according to variables that capture legal properties of interest. At a general level, examples include:

- *Topic variables*: Variables that code the domain, subject matter, or topic of a particular statute. For instance, whether a statute is about “corporate law,” “housing,” “energy resources,” or “foreign affairs.” These variables allow scholars to measure variation in the extent of state regulation in different domains.
- *Function variables*: Variables that code the function of the statute. For instance, whether statute bars certain types of conduct or creates a particular form of disclosure requirement.
- *Enforcement variables*: Variables that code properties of the statute’s enforcement process. For instance, whether the statute relies on private or public enforcement and whether it expands or contracts damages, such as through fee shifting provisions, treble damages provisions, or damages caps. Auxiliary variables could include against



whom a statute creates a private right and whether certain entities or individuals are immunized from suit.

- *Interaction variables*: Variables that code a statute’s interaction with other sources of law. For instance, whether a statute includes provisions that are contingent on federal law (*e.g.*, by relying on a federal definition) or overlap with model codes or uniform laws.

We will model the database on successful efforts by legal scholars to create and distribute large-scale legal “datasets,” like the Comparative Constitutions Project or the U.S. Supreme Court Database.<sup>29</sup> The practical difficulties in collecting and annotating legal texts limits the types of analyses legal scholars can perform. By shouldering the burden of data processing and labeling—and distributing the produced datasets in an open and accessible way—these initiatives have spurred significant scholarship in their respective fields. It is our hope to follow in their footsteps.

### *B. What Could It Be Used for?*

An easily accessible database of state laws would provide a wealth of benefits and open up research in new directions. By way of comparison, since the Comparative Constitutions Project launched in 2005, it collected and analyzed thousands of constitutional texts and made that data publicly available.<sup>30</sup> We aim to do the same for state statutes.

First, a database would allow readers to evaluate claims in existing scholarship on state law. As discussed above, law review articles repeatedly make claims about developments and trends in state statutes. Without a full accounting of the statutory provisions underlying those claims, it is difficult to evaluate their veracity. An open database would therefore make it easier to both research and verify claims about state law.

Second, providing a complete account of state statutory provisions allows for broader comparisons between states and empowers both researchers and legislators. State legislators constantly search for examples from other states and rarely adopt new statutory language wholesale. One example of this is the powerful influence of model codes: “Many state legislators look to model codes as a source of inspiration or guidance when drafting legislation. By adopting a model code, legislators can save time and effort in the legislative process and ensure that their

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29. COMPAR. CONSTS. PROJECT, *supra* note 11; *The Supreme Court Database*, WASH. UNIV. L., <http://scdb.wustl.edu/> [<https://perma.cc/ZEF2-EWXU>].

30. COMPAR. CONSTS. PROJECT, *supra* note 11.

laws are based on best practices or established standards.”<sup>31</sup> If researchers can better uncover trends in state statutes, this would “promote consistency and uniformity in laws across different states, which can be especially useful in areas where states share common interests or face similar challenges.”<sup>32</sup>

Third, the database would create opportunities to test theories about the development or structure of law via empirical measurement across the states. For instance, civil procedure scholars have long debated the prevalence of private enforcement in federal law and sought to test different theories, including the relationship between the separation of powers and private rights of action.<sup>33</sup> In our recent paper, *Private Enforcement in the States*, we pushed these debates forward by mapping the use of private rights of action in state law.<sup>34</sup> Despite the vast importance of private enforcement at the federal level, scholars had not been able to measure the prevalence of private rights of action in state law.<sup>35</sup> In that article, we used machine learning to identify private-enforcement provisions across all fifty states’ laws going back to 2003.<sup>36</sup> Our results showed that, “[e]ven by conservative estimates, there are more than 3,500 private-rights-of-action provisions in state law.”<sup>37</sup> Most importantly, once we had data on state laws, we could test existing theories of private-enforcement adoption:

The most prominent one—the separation-of-powers theory—posits that Congress enacts private rights of action when the executive is controlled by another political party. Our empirical bottom line is that we broadly fail to find evidence in favor of any of the theories . . . . Regression analyses based on our best estimates of private-enforcement provisions do not yield a statistically meaningful relationship between divided government and private-enforcement adoption. . . . We even find no correlation between an increased adoption of private enforcement and legislative control by either Democrats or Republicans.<sup>38</sup>

That project served as an example of possible uses of a state statutes database. Additionally, this database—particularly if extended to

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31. Zambrano, Guha, Peters & Xia, *supra* note 7, at 129.

32. *Id.* at 129–30.

33. *Id.* at 78.

34. *Id.* at 65.

35. *Id.* at 86.

36. *Id.* at 67.

37. *Id.* at 62.

38. *Id.*

encompass historic versions of state codes—would help us better study how state regulation evolves over time.<sup>39</sup>

Below, we will provide another example of an open research question: state laws with foreign ingredients. As we will discuss, this example shows how the database could enable scholars to track the frequency and distribution of specific types of foreign relations laws through variables corresponding to these types. For instance, scholars could track which states have passed laws regulating anti-national boycotts (*e.g.*, anti-BDS laws), foreign judgements, or government procurement. Second, this database would allow scholars to discover new types of statutes dealing with foreign affairs through the more broadly coded “foreign affairs” topic variable. Scholars could examine whether, in aggregate, state involvement in foreign affairs has been increasing, and at what rate. They could analyze coded statutes to determine whether states are enacting laws exercising power in new ways or over novel substantive issues.

### *C. What Variables Will the Database Contain?*

We hope to involve the broader legal academic community in the construction of this database by structuring the project as an open and collaborative effort.<sup>40</sup> Given the relevance of state statutes to a broad cross section of scholars, we believe a database will be most useful if it captures a diverse array of variables reflecting the interests of different areas of legal study. Concretely, we imagine the collaborative component of the database’s construction would be structured as follows: First, we hope to solicit ideas from scholars for different variables that could be coded. Second, as we apply our methodology to label clauses, we will work with participating scholars through the various stages of quality control to ensure that annotations are sufficiently accurate.

The collaborative and open-participation aspects of this project are inspired by similar efforts both within and outside of law. In the sciences and engineering, researchers have frequently adopted this model of collaboration to develop large scale empirical artifacts. We think this structure has two primary benefits. First, working with the broader legal academic community to construct this database allows for the integration of diverse subject-matter expertise. Scholars of different subject matters—administrative law, criminal law, civil procedure, and more—

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39. *See id.* at 67.

40. *See, e.g.*, Neel Guha et al., *LegalBench: A Collaboratively Built Benchmark for Measuring Legal Reasoning in Large Language Models*, ARXIV 4 (Aug. 23, 2023), <https://www.arxiv.org/pdf/2308.11462> [<https://perma.cc/53VZ-X9Q6>].

understand which types of statutory variables would be informative and how they should be conceptually constructed.

Second, a database produced through a community-driven effort allows for diverse perspectives regarding how statutory variables should be defined. It may be that scholars disagree on the definitions of variables or the boundaries of certain concepts as they manifest in statutes. In these instances, the database could contain variables corresponding to different possible definitions, allowing the ultimate users of the database to decide which they prefer. Ordinarily, such an approach is not possible because annotating a single variable is so expensive.<sup>41</sup> But because large language models provide a mechanism for cheaply generating annotations, they allow us to label potentially more variables.<sup>42</sup>

#### *D. New Methods*

The core challenge in producing this type of database is annotating statutes. Because the aggregate of state law is so voluminous, the traditional approach of manual annotation is infeasible.<sup>43</sup> Thus, we propose utilizing large language models to significantly automate the coding process. LLMs—the best-known example of which is OpenAI’s ChatGPT—are a novel class of language-based artificial intelligence systems capable of performing complex reasoning over textual inputs.<sup>44</sup>

We believe LLMs are particularly well suited for our project for two reasons. First, while traditional machine learning methods require building “training sets” consisting of hundreds or thousands of labeled samples, LLMs can be “taught” to label text with only a description of the variable to be coded and a handful of examples.<sup>45</sup> In other words, LLMs can be configured to perform labeling using precisely the type of guidance given to a law student research assistant. This makes them particularly useful for projects like ours, where the objective is to annotate many different variables with as little manual coding as possible. Second, our prior work has revealed that modern LLMs are already quite

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41. *See id.* at 6.

42. *Id.*

43. For reference, our current collection of statutes (across all states) for the year 2021 contains approximately 21 million sentences, or 440 million words.

44. *See* Harry Surden, *ChatGPT, AI Large Language Models, and Law*, 92 *FORDHAM L. REV.* 1941, 1942–43 (2024); Guha et al., *supra* note 40, at 4, 6.

45. *See* Guha et al., *supra* note 40, at 6. Computer science literature refers to this process as “in-context learning” and to the combined textual description and demonstrations as a “prompts.” *See, e.g.*, Sang Michael Xie & Sewon Min, *How Does In-Context Learning Work? A Framework for Understanding the Differences from Traditional Supervised Learning*, *STAN. AI LAB BLOG* (Aug. 1, 2022), <https://ai.stanford.edu/blog/understanding-incontext/> [<https://perma.cc/KUS3-8KFT>].

capable of annotating legal texts, yielding accuracy rates that are satisfactory for downstream empirical analysis.<sup>46</sup> For instance, researchers building from our efforts have identified at least twelve different LLMs capable of classifying private rights of action in statutory text at an accuracy rate greater than ninety percent.<sup>47</sup>

### III. CASE STUDY: FOREIGN AFFAIRS INGREDIENTS IN STATE LAW

This Part presents a preliminary application of our proposed methodology by identifying and studying state statutes containing foreign relations ingredients. In Section III.A, we enumerate several categories of statutes containing foreign ingredients and track their frequency across different states. In Section III.B, we explore statutes containing foreign ingredients more broadly and track the evolution of these statutes over time.

#### *A. Tracking Common Categories of Foreign Relations Statutes*

We focus on three categories of foreign affairs–related statutes: international promotion statutes, anti-boycott statutes, and anti-foreign law statutes. These three categories involve the states’ most aggressive and recent attempts to intervene in foreign affairs. As literature on state foreign relations details, state governments enter into international agreements for economic, symbolic, and political reasons.<sup>48</sup> In an era of polarization, many states face pressure from constituents to act on global issues even when, or because, the federal government is absent.<sup>49</sup> We therefore assembled these categories by seeking specific examples of economic, symbolic, and political foreign relations statutes that are referenced in the relevant literatures without any systematic attempt to quantify their appearance.

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46. See Guha et al., *supra* note 40, at 13–14.

47. Neel Guha et al., *LegalBench*, CTR. FOR RSCH. ON FOUND. MODELS: HOLISTIC EVALUATION OF LANGUAGE MODELS, <https://crfm.stanford.edu/helm/lite/latest/#/groups/legalbench> (last visited Oct. 7, 2024) (click on tab labeled “subset: proa” to view the performance data of different LLMs for predicting private rights of action; the column “EM” indicates accuracy).

48. See Erie, *supra* note 16, at 286–87.

49. See *id.* at 258–59.

Statute Category	Description
<i>Economic:</i> International promotion statutes	Statutes that create public offices or entities to promote the state's economic interests abroad.
<i>Symbolic:</i> Anti-boycott statutes	Statutes that regulate nationality-based boycotts of goods and services.
<i>Political:</i> Anti-foreign law statutes	Statutes that enjoin, limit, or condition enforcement of foreign law by state courts or tribunals.

Table 1. *Statutory Categories Analyzed*<sup>50</sup>

These three areas have provoked media attention and challenges on the propriety of state foreign relations. With regards to *economic* international promotion statutes, Texas has been particularly aggressive—Governor Greg Abbott notoriously visited the United Kingdom to sign a mutual cooperation agreement.<sup>51</sup> (The U.K. is the largest foreign investor into Texas companies.)<sup>52</sup> Similarly, the California Governor's Office touts its “international diplomacy” that has produced dozens of agreements with foreign nations.<sup>53</sup> As for *symbolic* statutes, states have wrestled with a movement to boycott Israel (BDS). A few years ago, the Governor of Illinois signed an anti-BDS statute that sought to “divest . . . from companies that participate in the [BDS] movement targeting Israel.”<sup>54</sup> Finally, in one of the most heated areas of statutory activity, several states have banned the use of foreign law in state courts or tribunals. Several states between 2010 and 2012 enacted laws “to

50. We draw from an article that looked at similar categories. *See id.* at 258, 265–66, 268, 286.

51. *See* Press Release, Greg Abbott, Tex. Governor, Governor Abbott Strengthens Texas' Economic Partnership with the United Kingdom (Mar. 15, 2024), <https://www.gov.texas.gov/news/post/governor-abbott-strengthens-texas-economic-partnership-with-the-united-kingdom> [<https://perma.cc/L9MT-QWCX>].

52. *Id.*

53. *International Diplomacy*, CAL. GOVERNOR'S OFF. BUS. & ECON. DEV., <https://www.business.ca.gov/advantages/international-trade-and-investment/international-collaboration/international-diplomacy/> [<https://perma.cc/7C6H-JVCC>].

54. Press Release, Bruce Rauner, Ill. Governor, Governor Signs Historic Anti-BDS Law in Illinois (July 23, 2015), <https://www.illinois.gov/news/press-release.13202.html> [<https://perma.cc/HG74-MJKY>].

restrict the circumstances in which state courts can consider foreign or religious laws in their decisions.”<sup>55</sup>

Moving away from the anecdotal and into the empirical, we sought to measure the actual appearance of these laws in state statutes. For each category, we first devised a set of query keywords designed to capture statutory clauses belonging to the category. Keywords are intended to be overinclusive and thus frequently capture statutes unrelated to the category. After applying keywords to filter down our database of 2021 state laws to a subset of potentially relevant statutes, we applied a large language model to perform a fine-grained evaluation to determine whether the statute belonged to the category.<sup>56</sup> We caution that our results are preliminary. As we continue to develop this project, we intend to both refine the machine learning methods and engage in more rigorous validation.

### 1. International Promotion Statutes

States have been both active and creative in promoting their economic interests around the world. We find 553 distinct statutory sections describing the creation of state offices, departments, corporations, or entities tasked with promoting the state’s economic interests abroad.<sup>57</sup> These statutes often promote specific industries or products, such as wine,<sup>58</sup> agriculture,<sup>59</sup> and corn.<sup>60</sup> They can also entail developing and maintaining relationships with foreign trading partners<sup>61</sup> or even establishing offices abroad.<sup>62</sup> For instance, a 2013 Minnesota statute gives a state officer the power to “establish three new Minnesota Trade Offices in key foreign markets selected for their potential to

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55. PEW RSCH. CTR., STATE LEGISLATION RESTRICTING USE OF FOREIGN OR RELIGIOUS LAW, 2010-2012, at 1 (2023), <https://www.pewresearch.org/wp-content/uploads/sites/7/2013/04/state-legislation-restricting-foreign-or-religious-law.pdf> [<https://perma.cc/2P3R-NM4W>].

56. We note several limitations of this methodology. First, it is possible that certain relevant statutes may be missed during keyword filtering because our keywords are incomplete. We also note that statutes may have unusual constructions which lead our keywords to miss them. For instance, a statute may not provide the relevant language explicitly but may instead reference another part of its code. Second, it is possible that our LLM may produce erroneous classifications because it fails to recognize relevant elements of the statute or correctly parse the language.

57. A manual examination of a sample of these statutes suggests that approximately eighty percent are correctly classified.

58. N.Y. UNCONSOL. LAW § 72 (McKinney 2024).

59. WYO. STAT. ANN. § 9-12-109 (2024).

60. VA. CODE ANN. § 3.2-1411 (2024).

61. ARK. CODE ANN. § 15-4-210 (2024).

62. MINN. STAT. § 116J.978(a) (2023).

increase Minnesota exports and attract foreign direct investment.”<sup>63</sup> Minnesota then expanded this to seven offices, “located in Canada, Mexico, Japan, European Union, United Kingdom, Australia and the ASEAN region (Indonesia, Thailand, Vietnam, Singapore, Malaysia, Philippines, Myanmar, Cambodia, Laos, and Brunei).”<sup>64</sup> The Governor of Minnesota has touted these offices as creating “more opportunities for Minnesota exports across the globe, which already support more than 118,000 jobs in [the] state.”<sup>65</sup> Across all states, we find that California, Washington, and Florida have the most provisions falling under this category.

## 2. Anti-Boycott Statutes

As discussed above, states have been active in symbolic foreign relations—supporting foreign countries via the use of anti-boycott statutes. We find seventy-eight distinct enactments across thirty-six states.<sup>66</sup> Generally, these statutes prevent public entities from contracting or purchasing services from companies engaged in boycotts of certain countries and/or instruct public officials to divest from these companies. Around thirty-eight enactments explicitly mention Israel and anti-Israeli boycotts. This is consistent with previous reports that “[t]wenty-seven states have adopted laws or policies that penalize businesses, organizations, or individuals that engage in or call for boycotts against Israel.”<sup>67</sup> But our comprehensive empirical approach allows us to go beyond the particular case of Israel and demonstrate that states have more general anti-boycott laws. South Carolina divests from any companies engaged in boycotts of any World Trade Organization member country, or any country that enjoys open trade with the United States.<sup>68</sup> Other statutes are older and more obscure. For instance, New York bars the hiring of labor from any entity that participated in an international boycott in violation of the U.S. Export Administration Act of 1969.<sup>69</sup>

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63. *Id.*

64. Press Release, Minn. Dep’t of Emp. & Econ. Dev., Minnesota Trade Office Expands International Representation (June 7, 2018), <https://content.govdelivery.com/accounts/MNDEED/bulletins/1f599f5> [<https://perma.cc/3BBL-DJQ8>].

65. *Id.*

66. Our manual validation found that sixty provisions actually regulate nationality-based boycotts.

67. *US: States Use Anti-Boycott Laws To Punish Responsible Businesses*, HUM. RTS. WATCH (Apr. 23, 2019, 12:00 AM), <https://www.hrw.org/news/2019/04/23/us-states-use-anti-boycott-laws-punish-responsible-businesses> [<https://perma.cc/C2N3-YFJR>].

68. *See* S.C. CODE ANN. § 11-35-5300 (2023).

69. *See* N.Y. LAB. LAW § 220-f (Consol. 2024).



### 3. Anti-Foreign Law Statutes

We measure sixty-four distinct enactments across forty-three states and manually validate that fifty-one enactments actually condition or limit a state's courts or tribunals from enforcing foreign laws or judgements. The vast majority of these provisions arise from states adopting the Uniform Foreign-Country Money Judgments Recognition Act.<sup>70</sup> However, a few states have additional laws limiting the reach of foreign courts. For instance, Idaho law provides that under certain circumstances, foreign defamation judgements are to be treated as inconclusive.<sup>71</sup>

#### *B. Discovering New Foreign Relations Statutes*

Next, we use our methodology to discover and analyze foreign relations statutes beyond the above categories. By way of reminder, we define foreign ingredients broadly and treat as relevant any statutory text that implicates or names foreign countries, discusses foreign laws or foreign courts, or expresses a view on a foreign policy issue. Both our keywords and the prompt we use for our large language model reflect this definition. The more expansive definition brings greater risks for both labeling error and subjectivity. Not all statutes that implicate foreign countries necessarily contain a “foreign relations ingredient,” and reasonable readers may disagree as to whether a particular state statute represents foreign relations activity. As an example, statutes controlling occupational licensing regimes might traditionally be seen as purely local regulation but may also be conduits for states to enforce preferences about immigration by recognizing certain foreign licenses.<sup>72</sup> A Louisiana statute, for instance, empowers the Louisiana State Board of Medical Examiners to issue temporary permits authorizing the practice of medicine only to citizens of Canada and the Republic of the Philippines.<sup>73</sup>

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70. See *Foreign-Country Money Judgments Recognition Act*, UNIF. L. COMM'N, <https://www.uniformlaws.org/committees/community-home?CommunityKey=ae280c30-094a-4d8f-b722-8dcd614a8f3e> [https://perma.cc/9TL9-LUMB] (indicating that thirty states have enacted this act).

71. IDAHO CODE § 6-3202 (2024).

72. See *Barriers to Work: Improving Access to Licensed Occupations for Immigrants with Work Authorization*, NAT'L CONF. OF ST. LEGISLATURES (Aug. 7, 2023), <https://www.ncsl.org/labor-and-employment/barriers-to-work-improving-access-to-licensed-occupations-for-immigrants-with-work-authorization> [https://perma.cc/FW7L-NE2G].

73. LA. STAT. ANN. § 37:1275.1 (2024).

## 1. Findings

For the year 2021, our annotation process cumulatively identified 4,716 distinct clauses across the fifty states, which we estimate correspond to 3,027 distinct enactments. Extrapolating the accuracy rate observed during our validation process reduces this to approximately 1,800 distinct enactments with a foreign affairs ingredient, or approximately 36 per state.<sup>74</sup>

Beyond the provisions identified in Section III.A, a substantial number of identified provisions relate to when state courts should recognize and enforce judgements by foreign courts. Notably, many of these provisions arise from Uniform Law Commission model acts, like the Uniform Child-Custody Jurisdiction and Enforcement Act (foreign child custody determinations),<sup>75</sup> the Interstate Family Support Act (foreign child support determinations),<sup>76</sup> and the Uniform Foreign-Country Money Judgments Recognition Act (foreign money judgements).<sup>77</sup>

We also discover more esoteric provisions. For instance, a 2012 Louisiana statute initiates a process to create an international language immersion school at the University of Louisiana at Lafayette.<sup>78</sup> The provision expressly required involvement from a representative to be appointed by the Consulate General of France in New Orleans.<sup>79</sup>

## 2. Distribution Across States and Referenced Foreign Nations

We find considerable variation in the number of relevant provisions across states. For instance, we measure 178 relevant enactments in

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74. We performed a validation of statutory provisions returned by our pipeline to assess the percentage that—in our subjective judgement—contained a foreign relations ingredient. In a sample of one hundred provisions, we found that approximately sixty percent did. The remaining forty percent of provisions corresponded to statutes about occupational licensing reciprocity, declarations of holidays pertaining to global events (*e.g.*, the end of World War II), and incidental references to conduct abroad (*e.g.*, reporting requirements for foreign income, regulation of foreign corporations, deaths in conveyance, import/export rules, and others).

75. PATRICIA M. HOFF, U.S. DEP'T OF JUST., JUV. JUST. BULL. NCJ 189181, THE UNIFORM CHILD-CUSTODY JURISDICTION AND ENFORCEMENT ACT 1, 3 (2001), <https://www.ojp.gov/pdffiles1/ojdp/189181.pdf> [<https://perma.cc/HC4U-EQL2>].

76. *See Interstate Family Support Act*, UNIF. L. COMM'N, <https://www.uniformlaws.org/committees/community-home?communitykey=71d40358-8ec0-49ed-a516-93fc025801fb> [<https://perma.cc/8FWH-3X26>].

77. *See Foreign-Country Money Judgments Recognition Act*, UNIF. L. COMM'N, <https://www.uniformlaws.org/committees/community-home?communitykey=ae280c30-094a-4d8f-b722-8dcd614a8f3e> [<https://perma.cc/XX5P-FBCV>].

78. *See* Act No. 851, § 17:1970.32, 2012 La. Acts 3429–30 (repealed 2021).

79. *Id.*

California, while only 21 for Utah. We find that states with the greatest number of enactments tend to be states with larger populations and states bordering either Canada or Mexico:

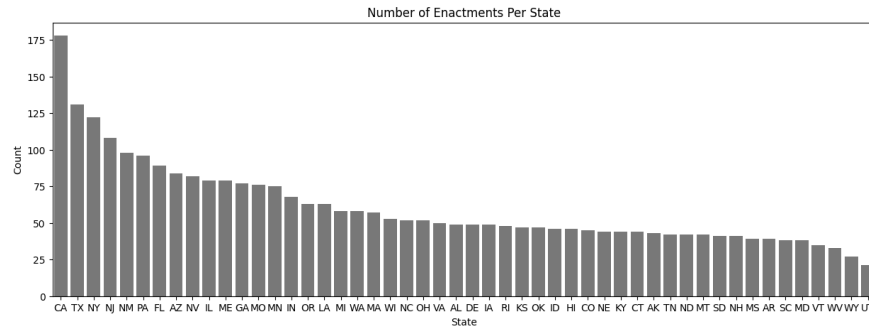


Figure 1. Number of Enactments by State

We additionally analyze how often different countries are explicitly mentioned in state codes. Perhaps unsurprisingly, the two most frequently mentioned foreign countries are Canada and Mexico. Mentions of these countries occur in a variety of contexts: We observe statutes that expressly permit collaboration and coordination between state and foreign agencies,<sup>80</sup> agree to compacts that include both other U.S. states and provinces of Canada,<sup>81</sup> and impose notification obligations to Mexico.<sup>82</sup> In contrast, mentions relating to countries like Iran and Sudan primarily occur in the context of divestment laws:<sup>83</sup>

Country	Number of Mentions
Canada	648
Mexico	234
Iran	166

80. See, e.g., OHIO REV. CODE ANN. § 4141.42 (LexisNexis 2024) (coordination of employee liability for unemployment compensation).

81. See, e.g., 2 R.I. GEN. LAWS § 2-13-1 (2024) (ratifying the Northeastern Interstate Forest Fire Protection Compact).

82. See, e.g., CAL. HEALTH & SAFETY CODE § 25178.3 (Deering 2024) (requiring the Director of the Department of Toxic Substances Control to notify when certain actions are taken with respect to hazardous waste).

83. See, e.g., FLA. STAT. § 215.473 (2024).

Israel	88
Vietnam	57
Sudan	54
Germany	28
Cuba	25
Afghanistan	21

*Table 2. Foreign Countries Explicitly Mentioned in State Codes*

Indeed, references which might seem surprising have explanations. Sudan, for instance, appears often because of its war crimes during the war in Darfur.<sup>84</sup> In 2007, Illinois enacted a statute requiring state pension funds to completely divest from any Sudanese companies or government entities.<sup>85</sup> Around that time, numerous other states took similar steps.<sup>86</sup>

### 3. Change over Time

Finally, we analyze how the frequency of foreign ingredients statutes has evolved over time, according to our measurements. For the 2007 versions of state codes, our annotation process cumulatively identified 3,249 distinct clauses across the fifty states, which we estimate correspond to 2,479 distinct enactments. Thus, between 2007 and 2021 we estimate a growth of approximately 45% for clauses and 22% for enactments. These figures provide preliminary empirical support for the notion that states have expanded their foreign relations activity over the past seventeen years.

## CONCLUSION

State statutes are a potentially valuable source of empirical data for legal scholars across a broad spectrum of areas. But actually conducting empirical work on state statutes is difficult, due to challenges with data accessibility and annotation. To address these difficulties, we lay out our vision for the “State Statutes Project”—an effort to construct an annotated database of state statutes in which statutes are coded for variables relevant to legal scholars. There are two important aspects to our project. First,

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84. See, e.g., *id.* (defining “complicit” as “taking actions during any preceding 20-month period which have directly supported or promoted the genocidal campaign in Darfur”).

85. 2007 Ill. Laws 7166–83; see also Press Release, Rod R. Blagojevich, *supra* note 18.

86. Press Release, Rod R. Blagojevich, *supra* note 18.

we intend to use the latest cutting-edge tools in AI to assist in statute analysis, which will allow us to code variables while minimizing costs. Second, we hope to collaborate with the broader legal community to identify the which variables or features of statutes should be coded. Our ultimate hope is that the database we build can support greater research into the states.

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