QGIS SPATIAL ANALYSIS

Uneven Geography of School Book Bans

Published 2024-2025 concentration and readiness for district-level analysis

Prepared September 3, 2026 | Data status: September 1, 2026

6,870	83.1%	90.9%
2024-2025 instances	in Florida, Texas, Tennessee	of state-only total

1. Executive summary

The QGIS package converts the revised banned-books analysis into a reproducible spatial workspace. It maps the three states for which exact high-volume totals are available in the current published summary, preserves DoDEA as a non-geographic category, and leaves the 573-instance remainder unallocated rather than inventing state values.

Florida, Texas, and Tennessee account for 5,707 of the 6,870 published instances, or 83.1%. After DoDEA is removed from the geographic denominator, those three states account for 90.9% of the state-only total. The result confirms strong concentration in the published record, but it does not explain why restrictions occurred.

2. Questions addressed by the GIS analysis

- Where are the exact published 2024-2025 high-volume state totals located?
- How much of the national published total is concentrated in Florida, Texas, and Tennessee?
- How does the interpretation change when the non-state DoDEA count is removed from the geographic denominator?
- Which spatial questions must wait for the detailed title-district event file and validated NCES district boundaries?

3. Data sources and layer boundaries

Layer or table	Use	Boundary or caution
state_focus_points	Proportional-symbol map of FL, TX, and TN	Approximate centroids; exact published counts
state_tile_grid	Offline cartogram and completeness display	Schematic positions; gray states have no assigned count
published_counts	Five-category published summary	DoDEA is non-geographic; other states remain aggregated
annual_series	Four-year trend	Counts new restrictions in each school year
Census TIGERweb	Online state boundaries	January 1, 2024 generalized boundaries; requires network access

Sources: PEN America, 2024-2025 Index and The Normalization of Book Banning; U.S. Census Bureau TIGERweb Generalized ACS 2024 State/County service.

4. Spatial method

- The online boundary layer uses U.S. Census Bureau generalized state polygons. The project CRS is WGS 84 (EPSG:4326).
- Exact state totals are represented by proportional symbols placed at approximate state centroids. The symbol layer is joined conceptually by the two-letter state abbreviation.
- An offline state tile grid is included because the analysis package must remain interpretable when the Census service is unavailable. Tile position does not represent land area, distance, or adjacency with survey precision.
- The principal concentration measure is CR3: the combined count for the three highest-volume states divided by the chosen denominator.
- No Moran's I, local cluster statistic, or state-level rate is calculated. Individual totals for the remaining affected states and the enrollment denominator needed for rates are not available in the current summary file.

5. Results

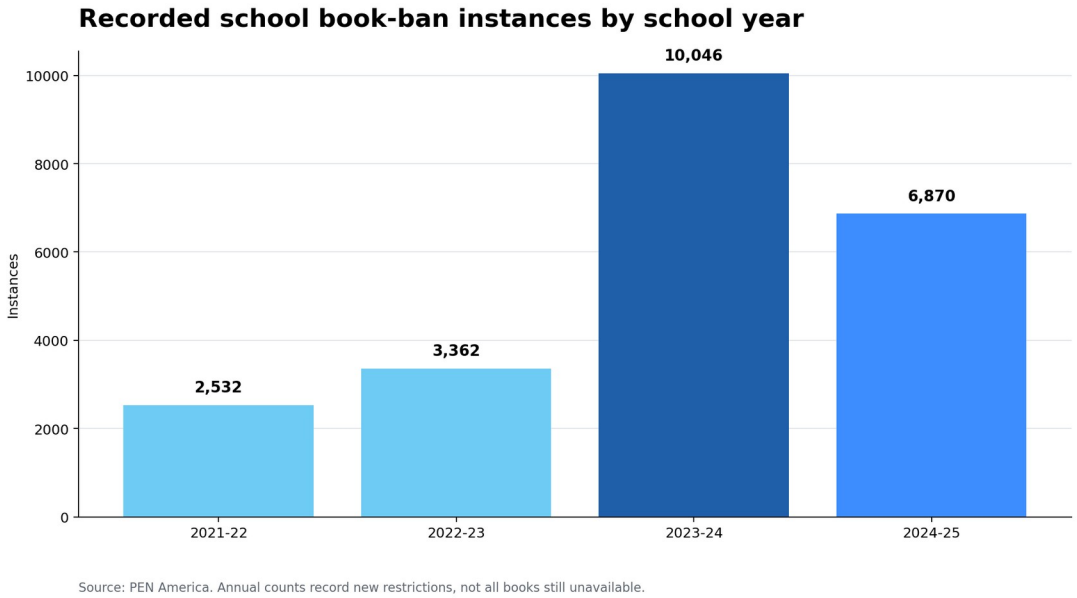


Figure 1. PEN America annual school book-ban instances. The annual series records restrictions when reported or triggered; it is not the number of books still unavailable at year end.

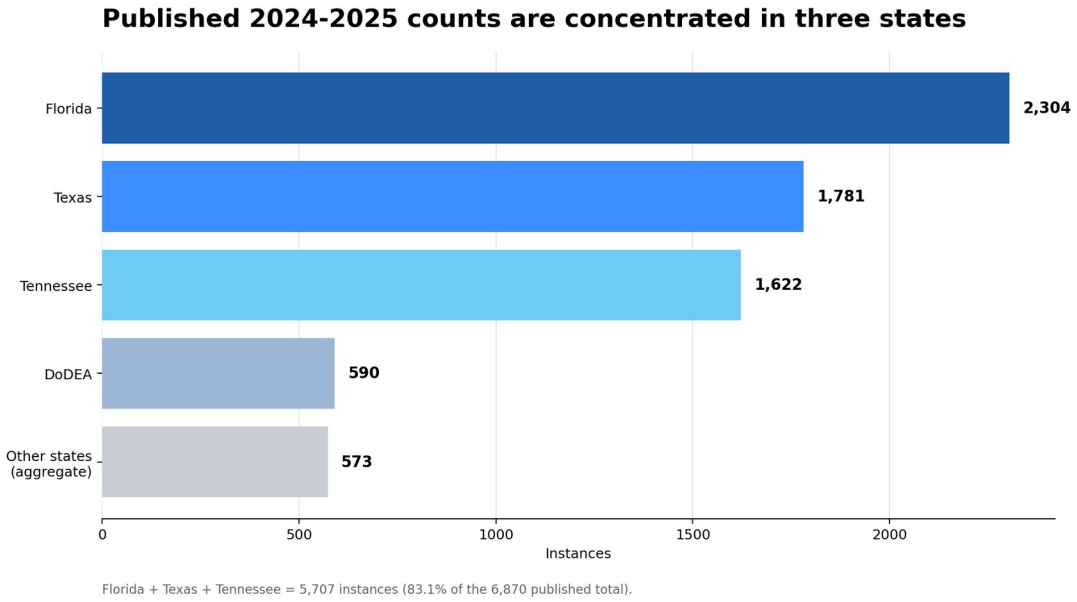


Figure 2. Published 2024-2025 totals used in the QGIS package. DoDEA is retained as a separate, non-state system.



Figure 3. Offline state tile map. Only Florida, Texas, and Tennessee receive exact values; gray tiles are deliberately left without a count.

Metric	Value	Interpretation
2024-2025 published total	6,870	Includes states and DoDEA
Top-three state total	5,707	Florida + Texas + Tennessee
CR3, all published instances	83.1%	5,707 / 6,870
State-only denominator	6,280	Published total less DoDEA's 590
CR3, state-only	90.9%	5,707 / 6,280
Florida share	33.5%	2,304 / 6,870

Calculation source: data/analysis_metrics in banned_books_analysis.gpkg. Percentages are rounded to one decimal place.

6. Interpretation

The spatial pattern is dominated by three states. This makes a national state-level correlation vulnerable to influence from a small number of high-volume jurisdictions and large list-based restriction episodes. Results should therefore be reported with and without these settings once the district-level file is available.

The map is descriptive. It does not establish that a state characteristic caused the restrictions, that one organization coordinated every event, or that every district within a highlighted state behaved similarly. District records, policy dates, review procedures, enrollment, news attention, and public response are needed to examine timing and within-state variation.

7. Using the QGIS project

1. Extract the complete package and open Banned_Books_QGIS_Analysis.qgz in QGIS 3.28 or later.
2. Keep the data folder beside the QGZ file so the relative GeoPackage paths resolve.
3. The online Census state layer loads when internet access is available. If it does not load, turn on the Offline state tile grid layer and zoom to it.
4. Open the Analysis metrics and Analysis notes tables to review denominators and cautions before exporting a map.
5. Run scripts/run_in_qgis.py from the QGIS Python Console to reprint the concentration calculations and add any missing attribute tables.

8. Limitations

- The current map does not allocate the 573-instance remainder to individual states because the summary source used for this deliverable does not provide those state values.
- Raw counts are not adjusted for student enrollment, district size, reporting coverage, or time at risk.
- PEN America and ALA use different definitions and coverage. Their records should remain separate rather than be merged into one spatial outcome.
- State-mandated restrictions and district actions are not interchangeable and should remain separate in later mapping.
- Social-media records are outside Phase 1 and require separate IRB and platform-access review.

9. Next spatial analysis after the row-level export

- Geocode each title-district event to a validated NCES district identifier and boundary.
- Create district-month counts including zero-event months and calculate rates with enrollment as the exposure denominator.
- Map restriction starts, duration, rescission, and documented public response as separate outcomes.
- Build dated policy, news, and verified advocacy layers, then compare their order without treating co-occurrence as proof of cause.
- Run influence and sensitivity checks that remove mega-ban events, statewide mandates, DoDEA, and districts with incomplete title detail.

10. Sources

PEN America. PEN America Index of School Book Bans, 2024-2025. https://pen.org/book-bans/pen-america-index-of-school-book-bans-2024-2025/

PEN America. The Normalization of Book Banning. https://pen.org/report/the-normalization-of-book-banning/

U.S. Census Bureau. Generalized ACS 2024 State/County MapServer, States 5M layer. https://tigerweb.geo.census.gov/arcgis/rest/services/Generalized_ACS2024/State_County/MapServer/8

Project sources: Banned Books V2 - Research Proposal; Banned Books V2 - Data and Analysis Plan; Banned Books V2 - Final Report.