

State Perspective

The national figures belie enormous discrepancies in school librarian employment at state and regional levels. State geography alone contributes much to the harsh inequities of access to school librarians. This is evident when one considers the same numbers and ratios that were examined nationally: total numbers of school librarians, librarian full-time equivalent (FTE) per school, students per librarian FTE, and teacher FTE per librarian FTE.⁴ In addition to zeroing in on how much these figures can vary by state, this perspective identifies two factors that are positive and significant predictors of the level of school librarian employment in a state.

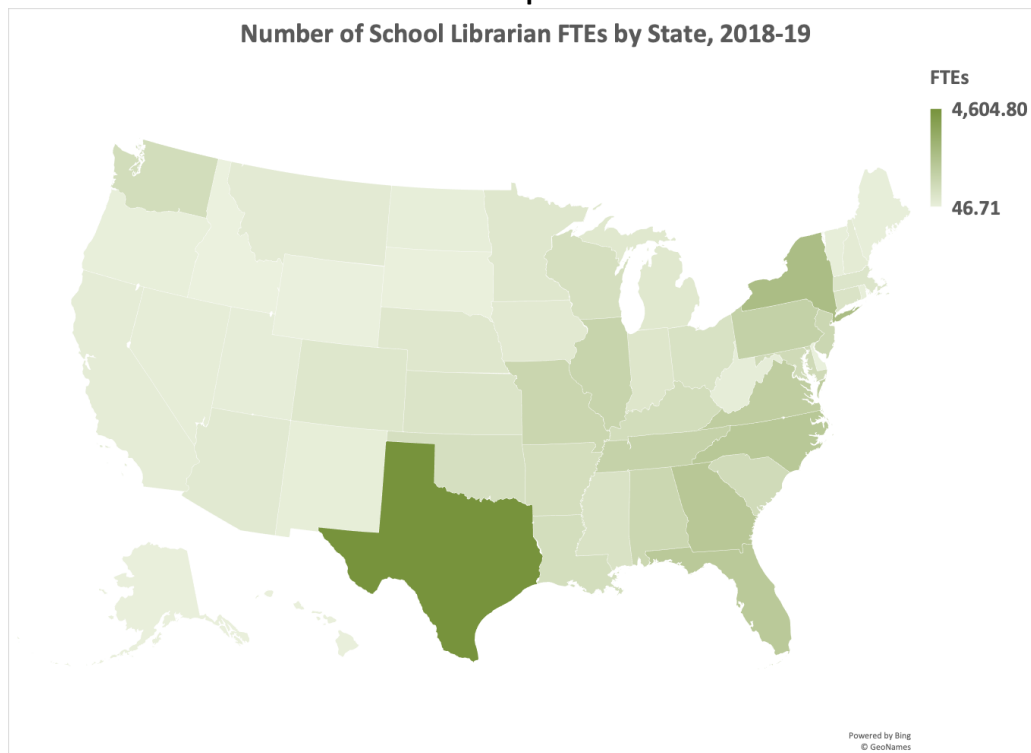
Number of School Librarians

*How many school librarians are there in each state, and how do those numbers vary by region?
How has each state's number of school librarians changed over time?*

While there were 42,279 school librarian full-time equivalents (FTEs) nationwide in 2018-19, their distribution among the states varied dramatically by state and U.S. region (i.e., Northeast, South, Midwest, West). Map 1 illustrates the strong state and regional patterns in the distribution of school librarian FTEs. Generally, there were more school librarians in the eastern half of the country than the western half—with the notable exception of Texas. Given the distribution of the U.S. population, that pattern is not surprising. There are some regional surprises, though. Among the four major U.S. regions, it is clear that the Southern states have the largest concentrations of school librarians. Texas has more than 4,600 school librarian FTEs. That was more than 10% of the national total, almost as many as the next two states, New York and Georgia, combined (over 2,500 and over 2,000 respectively), and more than the bottom 20 states combined. (See Tables 3a and 3b.)

In 2018-19, there were 42,279 U.S. school librarians; but they were not equally distributed by state. In Texas alone, there were more librarians than in the bottom 20 states combined.

Map 1



⁴ The state ratio of librarian FTE per school is the total school librarian FTE for a state divided by the total number of schools for the state. The state ratio of students per librarian FTE is the total number of students for a state divided by the total number of school librarian FTEs for the state. And, the state ratio of teacher FTE per librarian FTE is the total number of teacher FTEs for a state divided by the total number of librarian FTEs for the state.

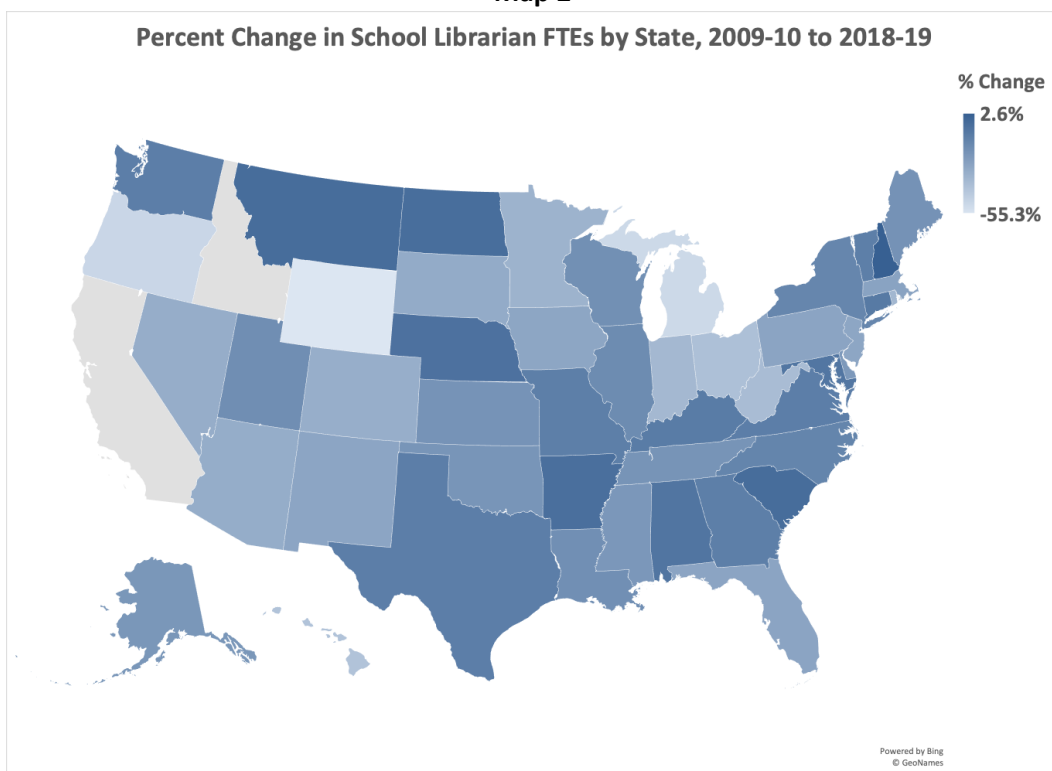
Table 3. Number of School Librarian FTEs by State, 2018-19

a. In alphabetical order by state		b. In descending order by number		
State	Number of School Librarian FTEs, 2018-19	Rank	State	Number of School Librarian FTEs, 2018-19
AK	133.60	1	TX	4,604.80
AL	1,322.28	2	NY	2,553.65
AR	967.49	3	GA	2,065.00
AZ	426.17	4	NC	2,043.05
CA	266.13	5	FL	1,986.85
CO	546.26	6	VA	1,791.53
CT	733.95	7	PA	1,599.38
DC	114.75	8	TN	1,532.00
DE	110.00	9	IL	1,444.56
FL	1,986.85	10	MO	1,359.63
GA	2,065.00	11	AL	1,322.28
HI	134.50	12	NJ	1,289.97
IA	412.46	13	MD	1,148.33
ID	46.71	14	SC	1,095.60
IL	1,444.56	15	WA	1,031.83
IN	575.38	16	KY	1,030.74
KS	676.40	17	LA	978.39
KY	1,030.74	18	AR	967.49
LA	978.39	19	WI	929.04
MA	621.15	20	OK	900.89
MD	1,148.33	21	OH	785.87
ME	194.30	22	MS	762.03
MI	483.54	23	CT	733.95
MN	512.66	24	KS	676.40
MO	1,359.63	25	MA	621.15
MS	762.03	26	IN	575.38
MT	365.21	27	CO	546.26
NC	2,043.05	28	NE	534.36
ND	187.68	29	MN	512.66
NE	534.36	30	MI	483.54
NH	333.60	31	AZ	426.17
NJ	1,289.97	32	IA	412.46
NM	209.92	33	MT	365.21
NV	257.50	34	NH	333.60
NY	2,553.65	35	CA	266.13
OH	785.87	36	NV	257.50
OK	900.89	37	UT	227.71
OR	164.73	38	WV	223.24
PA	1,599.38	39	NM	209.92
RI	193.86	40	VT	197.24
SC	1,095.60	41	ME	194.30
SD	96.18	42	RI	193.86
TN	1,532.00	43	ND	187.68
TX	4,604.80	44	OR	164.73
UT	227.71	45	HI	134.50
VA	1,791.53	46	AK	133.60
VT	197.24	47	DC	114.75
WA	1,031.83	48	DE	110.00
WI	929.04	49	SD	96.18
WV	223.24	50	WY	77.35
WY	77.35	51	ID	46.71
U.S. Total	42,279.45		U.S. Total	42,279.45

Change in the number of school librarian FTEs in each state over time has also been highly variable. Notably, though, the patterns are different for the last decade, 2009-10 to 2018-19, and for the last half of that decade, 2015-16 to 2018-19.

Between 2009-10 and 2018-19, one out of five school librarian FTEs was lost nationwide.

Map 2



CA and ID are excluded from this map as outliers. See Tables 4a and 4b.

Between 2009-10 and 2018-19, one out of five school librarian FTEs was lost nationwide. At the state level, however, change in school librarian FTEs was quite different. (See Map 2. Note: darker shades indicate a gain or lighter losses, lighter shades indicate heavier losses.) During that interval, only one state, New Hampshire, did not lose school librarian FTEs; it had more school librarian FTEs in 2018-19 than 2009-10. (See Tables 4a and 4b.) Every other state experienced some degree of FTE loss.

Between 2009-10 and 2018-19, New Hampshire was the only state where the total number of school librarians did not decline.

While the state median reflected the national trend, 10 states stand out as experiencing extraordinarily high losses. California lost more than three out of four librarian FTEs (-76.7%), while Idaho lost more than two-thirds (-66.9%) and Wyoming lost more than half (-55.3%). Seven other states lost between a third and half of their librarian FTEs over the decade: Michigan (-49.5%), Oregon (-48.6%), Hawaii (-40.2%), Ohio (-38.9%), West Virginia (-37.3%), Indiana (-35.5%), and Rhode Island (-34.8%).

At the other extreme, 10 states lost fewer than 10% of their librarian FTEs during that period: Kentucky (-9.4%), Connecticut (-8.5%), Maryland (-6.8%), Alabama (-6.6%), D.C. (-5.9%), Nebraska (-4.9%), Arkansas (-3.9%), North Dakota (-3.3%), Montana, and South Carolina (both -2.9%).

As a result, students and teachers in some states were at far greater risk of losing their school librarians than their counterparts in other states. One of the most notable things about these two sets of states—those that experienced double-digit losses and those that experienced single-digit ones—is that both include states from all four U.S. Census regions.

**Table 4. Percent Change in School Librarian FTEs
by State, 2009-10 to 2018-19**

a. In alphabetical order by state

State	Percent Change, 2009-10 to 2018-19
AK	-20.9%
AL	-6.6%
AR	-3.9%
AZ	-30.5%
CA	-76.7%
CO	-30.9%
CT	-8.5%
DC	-5.9%
DE	-22.0%
FL	-26.8%
GA	-10.6%
HI	-40.2%
IA	-27.6%
ID	-66.9%
IL	-16.4%
IN	-35.5%
KS	-19.5%
KY	-9.4%
LA	-17.9%
MA	-26.1%
MD	-6.8%
ME	-19.0%
MI	-49.5%
MN	-33.2%
MO	-10.7%
MS	-21.2%
MT	-2.9%
NC	-13.2%
ND	-3.3%
NE	-4.9%
NH	+2.6%
NJ	-27.5%
NM	-27.4%
NV	-30.9%
NY	-13.8%
OH	-38.9%
OK	-20.3%
OR	-48.6%
PA	-26.9%
RI	-34.8%
SC	-2.9%
SD	-29.8%
TN	-19.8%
TX	-10.4%
UT	-17.4%
VA	-10.5%
VT	-10.8%
WA	-10.5%
WI	-18.1%
WV	-37.3%
WY	-55.3%
State Average	-22.7%
State Median	-19.8%

b. In descending order by percent change

Rank	State	Percent Change, 2009-10 to 2018-19
1	NH	+2.6%
2	SC	-2.9%
2	MT	-2.9%
4	ND	-3.3%
5	AR	-3.9%
6	NE	-4.9%
7	DC	-5.9%
8	AL	-6.6%
9	MD	-6.8%
10	CT	-8.5%
11	KY	-9.4%
12	TX	-10.4%
13	VA	-10.5%
13	WA	-10.5%
15	GA	-10.6%
16	MO	-10.7%
17	VT	-10.8%
18	NC	-13.2%
19	NY	-13.8%
20	IL	-16.4%
21	UT	-17.4%
22	LA	-17.9%
23	WI	-18.1%
24	ME	-19.0%
25	KS	-19.5%
26	TN	-19.8%
27	OK	-20.3%
28	AK	-20.9%
29	MS	-21.2%
30	DE	-22.0%
31	MA	-26.1%
32	FL	-26.8%
33	PA	-26.9%
34	NM	-27.4%
35	NJ	-27.5%
36	IA	-27.6%
37	SD	-29.8%
38	AZ	-30.5%
39	NV	-30.9%
39	CO	-30.9%
41	MN	-33.2%
42	RI	-34.8%
43	IN	-35.5%
44	WV	-37.3%
45	OH	-38.9%
46	HI	-40.2%
47	OR	-48.6%
48	MI	-49.5%
49	WY	-55.3%
50	ID	-66.9%
51	CA	-76.7%
	State Average	-22.7%
	State Median	-19.8%

Between 2015-16 and 2018-19, the trend in school librarian employment improved somewhat. Librarian FTE losses slowed and became less severe in many states, while some states have actually experienced a recovery of FTEs.

Alabama was the standout state, experiencing a 38.2% gain in librarian FTEs over the past few years. (See Map 3.) The other double-digit gains were for D.C. (15.5%) and Alaska (13.2%). Seven other states that made single-digit gains were: Kansas, Michigan (both 7.3%), New York (6.1%), Virginia (5.8%), New Hampshire (4.1%), California (2.4%), and Arkansas (2.0%).

At the other extreme, 10 states reported FTE losses of 10% or more: Oklahoma (-10.1%), Tennessee (-11.2%), Illinois (-12.2%), Minnesota (-12.7%), Hawaii (-15.9%), Indiana (-16.9%), Louisiana (-18.0%), West Virginia (-20.4%), Nevada (-21.5%), and Wyoming (-28.6%). (See Tables 5a and 5b.)

Between 2015-16 and 2018-19, Alabama's number of school librarians increased by 38.2%.

Map 3

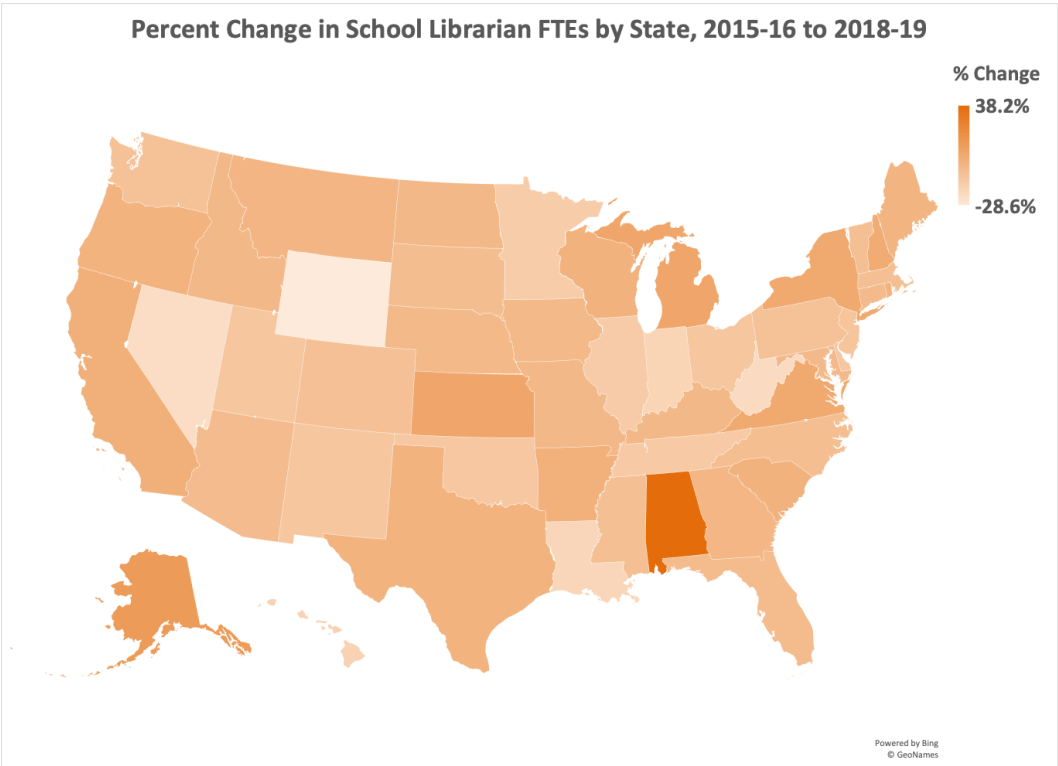


Table 5. Percent Change in School Librarian FTEs by State, 2015-16 to 2018-19

a. In alphabetical order by state

State	Percent Change, 2015-16 to 2018-19
AK	13.2%
AL	38.2%
AR	2.0%
AZ	-4.3%
CA	2.4%
CO	-6.3%
CT	-3.4%
DC	15.5%
DE	-9.8%
FL	-3.6%
GA	-1.0%
HI	-15.9%
IA	-2.4%
ID	-2.0%
IL	-12.2%
IN	-16.9%
KS	7.3%
KY	-2.1%
LA	-18.0%
MA	-5.7%
MD	-2.8%
ME	-0.3%
MI	7.3%
MN	-12.7%
MO	-2.3%
MS	-5.7%
MT	-0.7%
NC	-5.3%
ND	-2.0%
NE	-2.8%
NH	4.1%
NJ	-8.8%
NM	-9.7%
NV	-21.5%
NY	6.1%
OH	-9.6%
OK	-10.1%
OR	0.7%
PA	-7.0%
RI	0.3%
SC	0.8%
SD	-4.9%
TN	-11.2%
TX	0.6%
UT	-9.8%
VA	5.8%
VT	-5.8%
WA	-6.9%
WI	1.1%
WV	-20.4%
WY	-28.6%
State Average	-3.7%
State Median	-3.4%

b. In descending order by percent change

Rank	State	Percent Change, 2015-16 to 2018-19
1	AL	38.2%
2	DC	15.5%
3	AK	13.2%
4	KS	7.3%
4	MI	7.3%
6	NY	6.1%
7	VA	5.8%
8	NH	4.1%
9	CA	2.4%
10	AR	2.0%
11	WI	1.1%
12	SC	0.8%
13	OR	0.7%
14	TX	0.6%
15	RI	0.3%
15	ME	-0.3%
17	MT	-0.7%
18	GA	-1.0%
19	ID	-2.0%
19	ND	-2.0%
21	KY	-2.1%
22	MO	-2.3%
23	IA	-2.4%
24	NE	-2.8%
24	MD	-2.8%
26	CT	-3.4%
27	FL	-3.6%
28	AZ	-4.3%
29	SD	-4.9%
30	NC	-5.3%
31	MA	-5.7%
31	MS	-5.7%
33	VT	-5.8%
34	CO	-6.3%
35	WA	-6.9%
36	PA	-7.0%
37	NJ	-8.8%
38	OH	-9.6%
39	NM	-9.7%
40	UT	-9.8%
40	DE	-9.8%
42	OK	-10.1%
43	TN	-11.2%
44	IL	-12.2%
45	MN	-12.7%
46	HI	-15.9%
47	IN	-16.9%
48	LA	-18.0%
49	WV	-20.4%
50	NV	-21.5%
51	WY	-28.6%
	State Average	-3.7%
	State Median	-3.4%

State Ratio of Librarian FTE per School

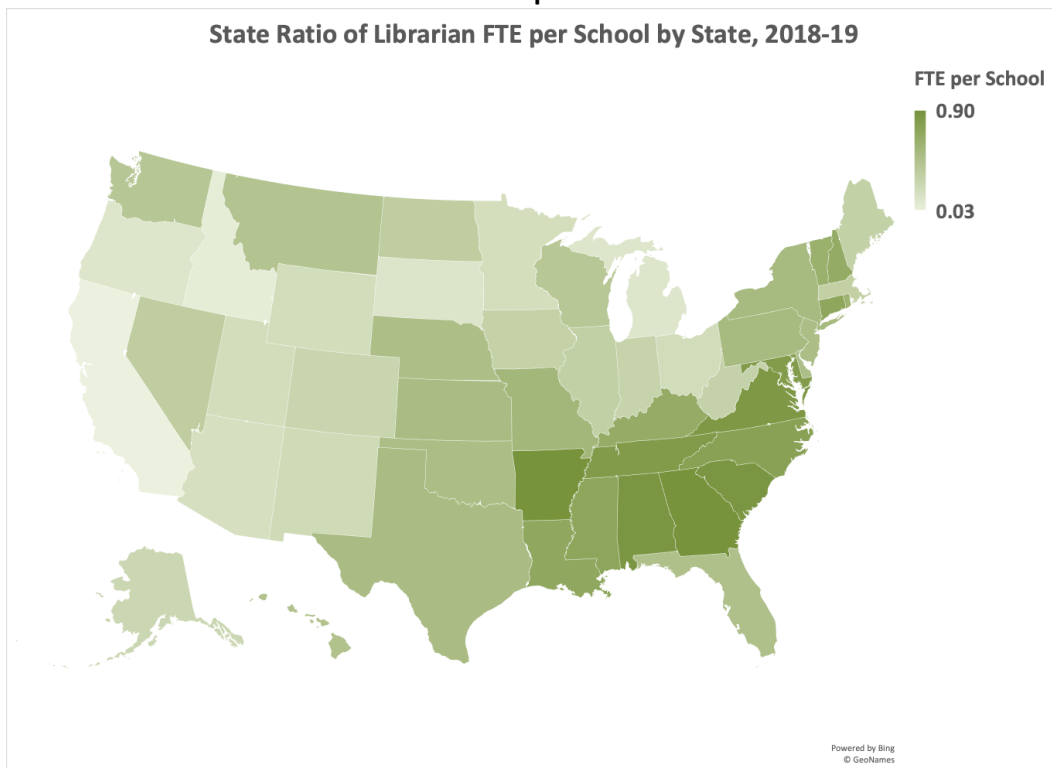
To what extent were there enough school librarians in each state in 2018-19 to provide a full-time librarian in every school, and how has that changed over time?

While the simple number of librarian FTEs for the nation and for states is interesting and meaningful within limits, a clearer perspective on the status of school librarians at the state level is gained by looking at their numbers relative to the number of schools.

School librarians were more likely to be found in schools in the South and the Northeast than in the Midwest and the West.

In displaying this ratio, Map 4 underscores the relatively strong presence of school librarians in schools in the South and, to a lesser extent, the Northeast.

Map 4



Of the 10 states with the highest state ratios of librarian FTE per school, 9 are in the South: Arkansas (.90 FTE per school), Georgia (.89), South Carolina, Alabama (both .87), Virginia (.85), Tennessee (.82), Maryland (.81), North Carolina (.77), and Mississippi (.72). Connecticut (also .72)—the only state in this group outside the South—rounds out the top 10 states on this ratio. (See Tables 6a and 6b.) There is also a regionality at the other extreme: of the 10 states with the lowest state ratios of librarian FTE per school, 9 are west of the Mississippi River: California (.03 FTE per school), Idaho (.06), Oregon (.13), South Dakota (.14), Arizona (.18), Wyoming, and Utah (both .21). Michigan (.13), Minnesota (.20), and Ohio (.22) round out the bottom 10 states on this ratio.

Table 6. State Ratio of Librarian FTE per School by State, 2018-19

a. In alphabetical order by state

State	State Ratio of Librarian FTE per School, 2018-19
AK	0.26
AL	0.87
AR	0.90
AZ	0.18
CA	0.03
CO	0.29
CT	0.72
DC	0.50
DE	0.49
FL	0.48
GA	0.89
HI	0.46
IA	0.31
ID	0.06
IL	0.33
IN	0.30
KS	0.51
KY	0.67
LA	0.71
MA	0.34
MD	0.81
ME	0.32
MI	0.13
MN	0.20
MO	0.56
MS	0.72
MT	0.44
NC	0.77
ND	0.36
NE	0.49
NH	0.68
NJ	0.50
NM	0.24
NV	0.36
NY	0.53
OH	0.22
OK	0.50
OR	0.13
PA	0.54
RI	0.61
SC	0.87
SD	0.14
TN	0.82
TX	0.51
UT	0.21
VA	0.85
VT	0.63
WA	0.42
WI	0.41
WV	0.31
WY	0.21
State Average	0.47
State Median	0.48

b. In descending order by state ratio

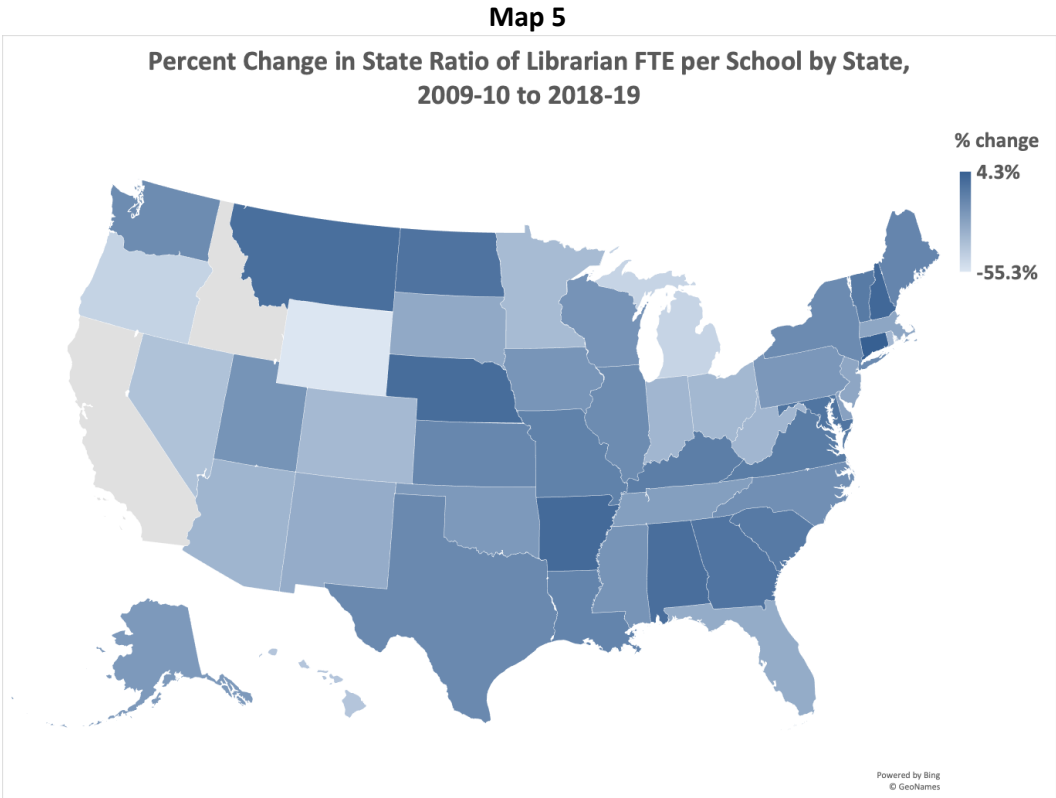
Rank	State	State Ratio of Librarian FTE per School, 2018-19
1	AR	0.90
2	GA	0.89
3	SC	0.87
3	AL	0.87
5	VA	0.85
6	TN	0.82
7	MD	0.81
8	NC	0.77
9	MS	0.72
9	CT	0.72
11	LA	0.71
12	NH	0.68
13	KY	0.67
14	VT	0.63
15	RI	0.61
16	MO	0.56
17	PA	0.54
18	NY	0.53
19	KS	0.51
19	TX	0.51
21	DC	0.50
21	NJ	0.50
23	OK	0.50
24	NE	0.49
24	DE	0.49
26	FL	0.48
27	HI	0.46
28	MT	0.44
29	WA	0.42
30	WI	0.41
31	ND	0.36
31	NV	0.36
33	MA	0.34
34	IL	0.33
35	ME	0.32
36	IA	0.31
36	WV	0.31
38	IN	0.30
39	CO	0.29
40	AK	0.26
41	NM	0.24
42	OH	0.22
43	UT	0.21
43	WY	0.21
45	MN	0.20
46	AZ	0.18
47	SD	0.14
48	OR	0.13
48	MI	0.13
50	ID	0.06
51	CA	0.03
	State Average	0.47
	State Median	0.48

Percent change in the state ratio of librarian FTE per school is another strong indicator of the trend in librarian losses since 2009-10. As with the number of school librarians, region was also a factor. (See Map 5 and Tables 7a and 7b. Note: In Map 5, darker shades indicate gains or lighter losses, lighter shades indicate heavier losses.)

Between 2009-10 and 2018-19, only 2 states gained librarian FTE per school: Connecticut (4.3%) and New Hampshire (0.6%), both in New England. Of the dozen jurisdictions with the lowest losses on this ratio, 7 states plus D.C. are in the South: Arkansas (-0.3%), Alabama (-2.1%), D.C. (-3.9%), Georgia (-4.8%), Maryland (-4.9%), South Carolina (-7.4%), Virginia (-8.4%), and Kentucky (-8.9%). Other states with lower losses included Nebraska (-1.5%), Montana (-2.3%), North Dakota (-4.2%), and Vermont (-7.6%)—all but the last being states west of the Mississippi River.

At the other extreme, were 14 states that lost a third or more on the state ratio of librarian FTE per school. The 3 states that fared worst were California (-77.5%), Idaho (-67.0%), and Wyoming (-55.3%). Three states falling between 45 and 50 percent were Michigan (-47.5%), Oregon (-46.7%), and Hawaii (-40.8%). And 8 states falling by 33 percent or more were Nevada (-39.1%), Minnesota (-36.0%), Colorado (-35.3%), Ohio (-34.9%), Rhode Island (-34.6%), West Virginia, Indiana (both -34.0%) and Arizona (-33.3%).

Between 2009-10 and 2018-19, Connecticut and New Hampshire were the only two states to experience gains in the state ratio of librarian FTE per school.



CA and ID are excluded from this map as outliers. See Tables 7a and 7b.

Table 7. Percent Change in State Ratio of Librarian FTE per School by State, 2009-10 to 2018-19

a. In alphabetical order by state		b. In descending order by percent change		
State	Percent change, 2009-10 to 2018-19	Rank	State	Percent change, 2009-10 to 2018-19
AK	-21.1%	1	CT	+4.3%
AL	-2.1%	2	NH	+0.6%
AR	-0.3%	3	AR	-0.3%
AZ	-33.3%	4	NE	-1.5%
CA	-77.5%	5	AL	-2.1%
CO	-35.3%	6	MT	-2.3%
CT	+4.3%	7	DC	-3.9%
DC	-3.9%	8	ND	-4.2%
DE	-24.8%	9	GA	-4.8%
FL	-29.3%	10	MD	-4.9%
GA	-4.8%	11	SC	-7.4%
HI	-40.8%	12	VT	-7.6%
IA	-19.3%	13	VA	-8.4%
ID	-67.0%	14	KY	-8.9%
IL	-15.2%	15	MO	-10.7%
IN	-34.0%	16	LA	-11.6%
KS	-13.0%	17	ME	-12.2%
KY	-8.9%	18	KS	-13.0%
LA	-11.6%	19	TX	-14.0%
MA	-26.8%	20	NY	-15.0%
MD	-4.9%	21	WA	-15.2%
ME	-12.2%	21	IL	-15.2%
MI	-47.5%	23	NC	-16.7%
MN	-36.0%	24	WI	-18.5%
MO	-10.7%	25	UT	-18.6%
MS	-18.9%	26	MS	-18.9%
MT	-2.3%	27	IA	-19.3%
NC	-16.7%	28	PA	-20.2%
ND	-4.2%	29	OK	-20.9%
NE	-1.5%	30	AK	-21.1%
NH	+0.6%	31	TN	-23.7%
NJ	-27.0%	32	DE	-24.8%
NM	-29.6%	33	MA	-26.8%
NV	-39.1%	34	NJ	-27.0%
NY	-15.0%	35	SD	-28.1%
OH	-34.9%	36	FL	-29.3%
OK	-20.9%	37	NM	-29.6%
OR	-46.7%	38	AZ	-33.3%
PA	-20.2%	39	IN	-34.0%
RI	-34.6%	39	WV	-34.0%
SC	-7.4%	41	RI	-34.6%
SD	-28.1%	42	OH	-34.9%
TN	-23.7%	43	CO	-35.3%
TX	-14.0%	44	MN	-36.0%
UT	-18.6%	45	NV	-39.1%
VA	-8.4%	46	HI	-40.8%
VT	-7.6%	47	OR	-46.7%
WA	-15.2%	48	MI	-47.5%
WI	-18.5%	49	WY	-55.3%
WV	-34.0%	50	ID	-67.0%
WY	-55.3%	51	CA	-77.5%
State Average	-21.9%		State Average	-21.9%
State Median	-18.9%		State Median	-18.9%

Since 2015-16, the trends for the state ratio of librarian FTE per school have improved dramatically in some states. (See Map 6.)

Between 2015-16 and 2018-19, D.C. (15.5%) and 3 states—Alabama (36.5%), Connecticut (29.4%), and Alaska (13.5%)—experienced double-digit gains on this ratio. (See Tables 8a and 8b.) The high gains by Alabama and Connecticut are most conspicuous in Map 6. A further 8 states made single-digit gains on this ratio. They were Kansas (7.8%), Virginia, New York (both 6.7%), New Hampshire (3.2%), Arkansas (2.9%), Maine (1.7%), Wisconsin, and California (both 1.1%).

Since 2015-16, D.C. and 11 states have gained school librarians relative to their numbers of schools, while 12 other states have experienced double-digit losses on this ratio.

At the other extreme were 12 states that logged double-digit losses on this ratio. Two states fell by more than 25 percent: Nevada (-28.0%) and Wyoming (-27.3%). Six states dropped by between 15 and 20 percent: West Virginia (-17.8%), Louisiana (-17.6%), Indiana (-16.7%), Hawaii (-16.5%), Illinois (-15.6%), and Minnesota (-14.9%). The remaining 4 states with losses on this ratio between 10 and 12 percent were Utah (-12.1%), Tennessee (-11.3%), Delaware (-10.6%), and Oklahoma (-10.5%). Perhaps the most noteworthy regionality in these results is that none of these states is in the Northeast.

Map 6

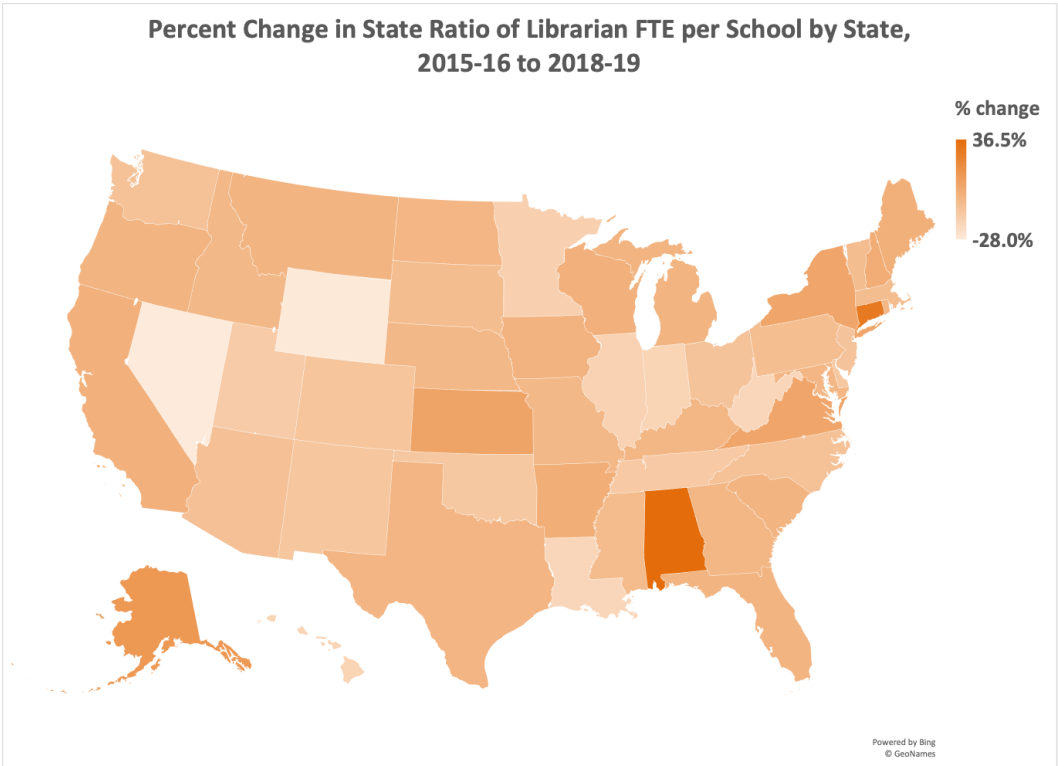


Table 8. Percent Change in State Ratio of Librarian FTEs per School by State, 2015-16 to 2018-19

a. In alphabetical order by state		b. In descending order by percent change		
State	Percent change, 2015-16 to 2018-19	Rank	State	Percent change, 2015-16 to 2018-19
AK	13.5%	1	AL	36.5%
AL	36.5%	2	CT	29.4%
AR	2.9%	3	DC	15.5%
AZ	-6.7%	4	AK	13.5%
CA	1.1%	5	KS	7.8%
CO	-8.9%	6	VA	6.7%
CT	29.4%	6	NY	6.7%
DC	15.5%	8	NH	3.2%
DE	-10.6%	9	AR	2.9%
FL	-0.3%	10	ME	1.7%
GA	-1.5%	11	WI	1.1%
HI	-16.5%	11	CA	1.1%
IA	0.0%	13	IA	0.0%
ID	-2.2%	14	MI	-0.2%
IL	-15.6%	15	FL	-0.3%
IN	-16.7%	16	OR	-0.4%
KS	7.8%	17	SC	-0.5%
KY	-1.6%	18	MT	-0.7%
LA	-17.6%	19	TX	-1.1%
MA	-5.2%	20	ND	-1.3%
MD	-1.5%	21	MD	-1.5%
ME	1.7%	21	GA	-1.5%
MI	-0.2%	23	KY	-1.6%
MN	-14.9%	24	RI	-1.9%
MO	-2.4%	25	ID	-2.2%
MS	-3.7%	26	MO	-2.4%
MT	-0.7%	26	NE	-2.4%
NC	-7.2%	28	MS	-3.7%
ND	-1.3%	29	SD	-4.8%
NE	-2.4%	30	MA	-5.2%
NH	3.2%	30	VT	-5.2%
NJ	-8.3%	32	PA	-5.4%
NM	-9.5%	33	AZ	-6.7%
NV	-28.0%	34	NC	-7.2%
NY	6.7%	35	WA	-7.6%
OH	-8.2%	36	OH	-8.2%
OK	-10.5%	37	NJ	-8.3%
OR	-0.4%	38	CO	-8.9%
PA	-5.4%	39	NM	-9.5%
RI	-1.9%	40	OK	-10.5%
SC	-0.5%	41	DE	-10.6%
SD	-4.8%	42	TN	-11.3%
TN	-11.3%	43	UT	-12.1%
TX	-1.1%	44	MN	-14.9%
UT	-12.1%	45	IL	-15.6%
VA	6.7%	46	HI	-16.5%
VT	-5.2%	47	IN	-16.7%
WA	-7.6%	48	LA	-17.6%
WI	1.1%	49	WV	-17.8%
WV	-17.8%	50	WY	-27.3%
WY	-27.3%	51	NV	-28.0%
State Average	-3.4%		State Average	-3.4%
State Median	-2.4%		State Median	-2.4%

State Ratio of Students per School Librarian FTE

If each state's students had had equal access to its school librarians, how many students would a librarian in each state have been responsible for serving in 2018-19?

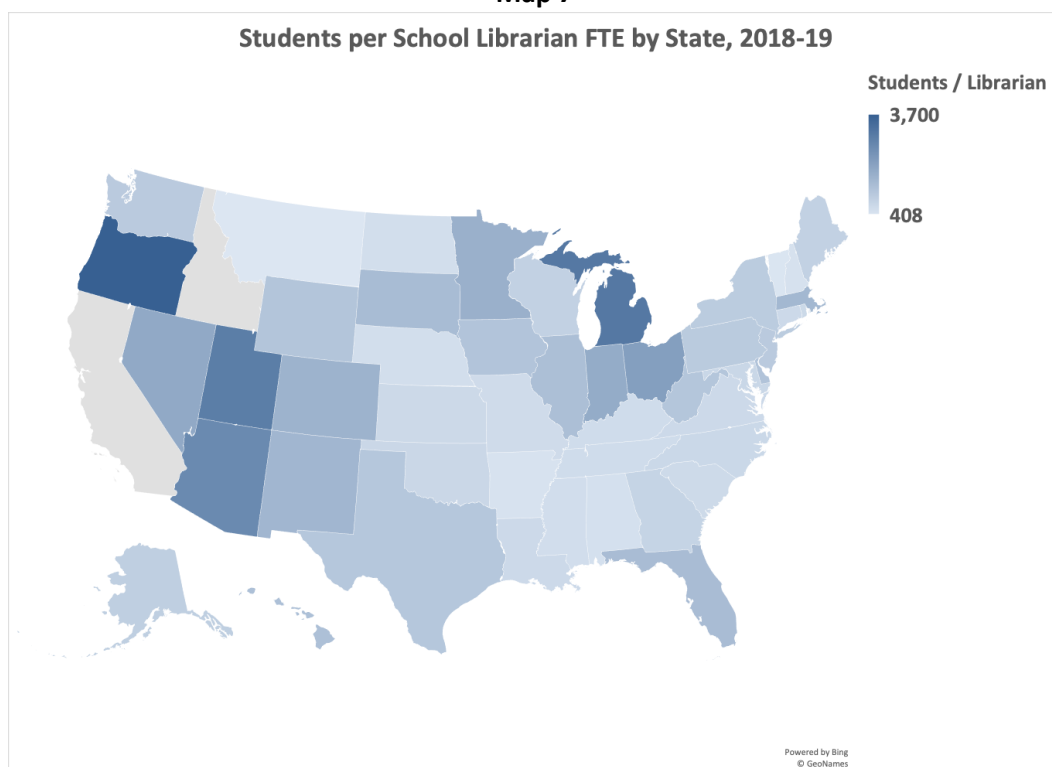
Like its national counterpart, the state ratio of students per one full-time equivalent (FTE) school librarian is a measure of the relative capacity of a state's school librarians to reach and teach students. Due to the skewed distribution of the nation's school librarians among the states, there were some extraordinary inequities between states on this measure.

Because school librarians were so unequally distributed across states, the number of students per librarian also varied dramatically from state to state.

Due to the profound lack of school librarians in California, it had 23,570 students per librarian FTE in 2018-19. Of course, few, if any, individual librarians in the state were responsible for serving that many students. That off-the-chart number is more a function of the total absence of librarians in so many districts throughout the state. Idaho had a slightly less extreme value on this ratio at 6,648 students per librarian. Due to the extremity of these values, those two states are excluded from Map 7 (which otherwise would have “washed out” the remaining states).

Ten additional states with the most students per librarian FTE were Oregon (3,700), Michigan (3,111), Utah (2,973), Arizona (2,679), Ohio (2,158), Nevada (1,913), Indiana (1,835), Minnesota (1,735), and Colorado (1,669). These larger numbers of students per librarian—from California to Colorado—make it extra difficult for school librarians to be “teacher librarians.” In reality, these problematic state ratios suggesting the large numbers of students each librarian must try to serve only hint at the true underlying reality—that these were states in which there were many “have” and “have not” districts where librarians are concerned. That means some students had the benefit of a librarian while others did not. (See Tables 9a and 9b.)

Map 7



Note: CA and ID are outliers. See Table 9.

At the other extreme are states with a low ratio of students per librarian. Almost certainly, these were states where more districts and schools had librarians as well as a higher librarian FTE per school, increasing the potential that librarians could reach more students as teachers of information literacy and inquiry-based learning.

8 of the 15 states with the lowest (best) ratios of students per librarian were in the South.

Two states—at opposite ends of the continent—had fewer than 500 students per librarian: Montana (408) and Vermont (441). Three other states in the Northeast had fewer than 750 students per librarian: New Hampshire (535), Connecticut (718), and Rhode Island (740). Four states in the Midwest had a similar ratio of students per librarian: North Dakota (607), Nebraska (611), Missouri (672), and Kansas (736). Most conspicuously, though, eight states in the South had fewer than 750 students per librarian: Arkansas (512), Alabama (559), Mississippi (618), Kentucky, Tennessee (both 658), South Carolina (713), Virginia (720), and Louisiana (728). Doubtless, the strong representation of Southern states on this ratio can be traced to their larger numbers of librarians and, consequently, their higher ratios of librarian FTEs to schools.

Table 9. Students per School Librarian FTE by State, 2018-19

a. In alphabetical order by state

State	Students per School Librarian FTE, 2018-19
AK	980
AL	559
AR	512
AZ	2,679
CA	23,570
CO	1,669
CT	718
DC	771
DE	1,258
FL	1,433
GA	856
HI	1,348
IA	1,248
ID	6,648
IL	1,372
IN	1,835
KS	736
KY	658
LA	728
MA	1,549
MD	781
ME	929
MI	3,111
MN	1,735
MO	672
MS	618
MT	408
NC	760
ND	607
NE	611
NH	535
NJ	1,085
NM	1,589
NV	1,913
NY	1,058
OH	2,158
OK	776
OR	3,700
PA	1,082
RI	740
SC	713
SD	1,445
TN	658
TX	1,180
UT	2,973
VA	720
VT	441
WA	1,089
WI	925
WV	1,200
WY	1,219
State Average	1,736
State Median	1,058

b. In descending order by students per librarian

Rank	State	Students per School Librarian FTE, 2018-19
1	MT	408
2	VT	441
3	AR	512
4	NH	535
5	AL	559
6	ND	607
7	NE	611
8	MS	618
9	KY	658
9	TN	658
11	MO	672
12	SC	713
13	CT	718
14	VA	720
15	LA	728
16	KS	736
17	RI	740
18	NC	760
19	DC	771
20	OK	776
21	MD	781
22	GA	856
23	WI	925
24	ME	929
25	AK	980
26	NY	1,058
27	PA	1,082
28	NJ	1,085
29	WA	1,089
30	TX	1,180
31	WV	1,200
32	WY	1,219
33	IA	1,248
34	DE	1,258
35	HI	1,348
36	IL	1,372
37	FL	1,433
38	SD	1,445
39	MA	1,549
40	NM	1,589
41	CO	1,669
42	MN	1,735
43	IN	1,835
44	NV	1,913
45	OH	2,158
46	AZ	2,679
47	UT	2,973
48	MI	3,111
49	OR	3,700
50	ID	6,648
51	CA	23,570
	State Average	1,736
	State Median	1,058

State Ratio of Teachers per School Librarian FTE

If each state's teachers had had equal access to its school librarians, how many teachers would a librarian in each state have been responsible for serving in 2018-19?

Like the state ratio of students per full-time equivalent (FTE) school librarian, the state ratio of teachers per librarian was driven largely by the number of librarians in the state and the ratio of librarian FTE per school.

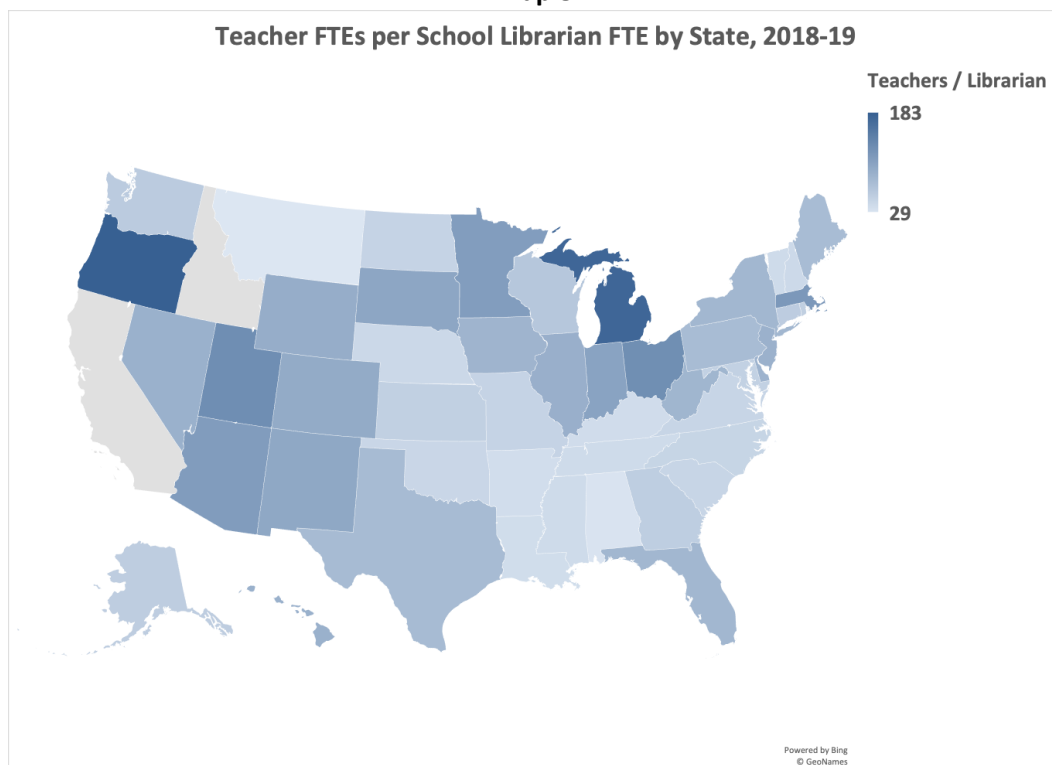
In Map 8, lighter shades indicate lower—better—ratios of teachers per librarian FTE, while darker shades indicate higher—less desirable—ratios. (This map is indistinguishable from the previous one.)

Three states had the best teacher/librarian ratios with fewer than 40 teachers per librarian FTE: Montana (29 teachers per librarian), Alabama (32), and Arkansas (39). Eleven additional states had better ratios with between 40 to 50 teachers per librarian FTE. Eight of the 13 were in the South: Louisiana (40 teachers per librarian), Kentucky (41), Tennessee, Mississippi, (both 42), Oklahoma (47), South Carolina (48), Virginia, and North Carolina (both 49). Three additional states with similar ratios were Vermont (42), New Hampshire (44), and Nebraska (45). When numbers of teachers per librarian are this low, it indicates that a state has more librarians, a higher ratio of librarian FTE per school, or both. This means it is more likely that school librarians have time to collaborate effectively with more teachers than if their state was at the other extreme on this ratio.

9 of the 13 states with the best ratios of teachers per librarian were in the South.

As on the student ratio, California and Idaho were outliers with 1,021 and 358 teachers per librarian FTE. (Excluded from Map 8.) Ten additional states had between 100 and 200 teachers per librarian: Oregon (183 teachers per librarian), Michigan (176), Utah (131), Ohio (129), Massachusetts (119), Arizona (114), Minnesota (113), Indiana (106), South Dakota (103), and New Mexico (101). Such large numbers of teachers per librarian make it extra challenging for librarians to collaborate effectively with all teachers, even if they have supportive administrators and teachers and flexibly scheduled access to libraries. (See Tables 10a and 10b.)

Map 8



Note: CA and ID are outliers. See Table 10.

**Table 10. Teacher FTEs per School Librarian FTE
by State (FTE), 2018-19**

a. In alphabetical order by state

State	Teacher FTEs per School Librarian FTE, 2018-19
AK	57
AL	32
AR	39
AZ	114
CA	1,021
CO	97
CT	58
DC	64
DE	87
FL	83
GA	57
HI	90
IA	86
ID	358
IL	92
IN	106
KS	54
KY	41
LA	40
MA	119
MD	53
ME	77
MI	176
MN	113
MO	50
MS	42
MT	29
NC	49
ND	50
NE	45
NH	44
NJ	90
NM	101
NV	90
NY	83
OH	129
OK	47
OR	183
PA	77
RI	55
SC	48
SD	103
TN	42
TX	78
UT	131
VA	49
VT	42
WA	60
WI	64
WV	85
WY	95
State Average	100
State Median	77

b. In descending order by teachers per librarian

Rank	State	Teacher FTEs per School Librarian FTE, 2018-19
1	MT	29
2	AL	32
3	AR	39
4	LA	40
5	KY	41
6	TN	42
6	MS	42
6	VT	42
9	NH	44
10	NE	45
11	OK	47
12	SC	48
13	VA	49
13	NC	49
15	MO	50
15	ND	50
17	MD	53
18	KS	54
19	RI	55
20	GA	57
20	AK	57
22	CT	58
23	WA	60
24	DC	64
24	WI	64
26	PA	77
26	ME	77
28	TX	78
29	FL	83
29	NY	83
31	WV	85
32	IA	86
33	DE	87
34	NJ	90
34	HI	90
34	NV	90
37	IL	92
38	WY	95
39	CO	97
40	NM	101
41	SD	103
42	IN	106
43	MN	113
44	AZ	114
45	MA	119
46	OH	129
47	UT	131
48	MI	176
49	OR	183
50	ID	358
51	CA	1,021
	State Average	100
	State Median	77

State Context Predictors of Statewide Ratio of Librarians to Schools & Change from 2015-16 to 2018-19

The variable status of school librarians from state to state and region to region raises questions about what explains those differences. Rather than mere geography, it seemed likely that such differences were explained by the very different context of the profession from state to state.

In late 2020, the SLIDE project surveyed its state intermediaries—representatives of state library associations and agencies committed to supporting this research—about policies, practices, and conditions in their states that provide the context for school librarian employment (Kachel & Lance, 2021).⁵ Issues surveyed included:

- State standards and guidelines,
- State certification requirements,
- Legal mandates for school library staffing,
- State government employee assigned to work with school libraries,
- State data about school librarian employment,
- Direct state funding for school libraries,
- State-subsidized subscriptions to, or discounts for, licensed databases, and
- Higher education institutions that prepare school librarians.

Of these factors that shape the context of school librarianship in each state, which ones were predictors of the state ratio of librarian FTE per school and how it has changed over time?

An analysis of the NCES state data file combined with those survey data identified two factors that are correlated positively and significantly with school librarian employment. School librarian employment patterns and trends are related to the state ratio of librarian FTE per school and change over time in the number of school librarian FTEs in each state.

State Mandate for School Librarians

Does it make a difference in school librarian employment if a state requires that schools have them?

Based on the 2020 study of state mandates, states with enforced legal mandates that schools employ some level of school librarian staffing averaged 0.61 librarian FTE per school in 2018-19. States that had such mandates, but did not enforce them, averaged 0.50 librarian FTE per school. And states that reported not having such mandates averaged 0.38 librarian FTE per school. Clearly, legal mandates for school librarians—and their enforcement—help to explain varying levels of school librarian staffing from state to state. (See Chart 6.)

School librarians were more prevalent in states that mandate their employment than in states that do not mandate them. And, in states with mandates, school librarians were more prevalent where those mandates are enforced than where they are not enforced. Librarian losses over time were also lowest in states with mandates and highest in states without mandates.

School librarian mandates have an equally pronounced association with change in school librarian staffing from state to state. (See Chart 7.) For this analysis, two time frames were assessed: 2009-10 to 2018-19 and 2015-16 to 2018-19. For states with enforced mandates, average loss over the decade was -9.0%. During the latter part of the decade, those states actually averaged 3.1% gains in school librarian FTEs. For states with unenforced mandates, librarian losses over the decade averaged -22.6%, and, since 2015-16, -2.5%. For states without mandates, rates of school librarian losses were greatest of all: -29.0% from 2009-10 to 2018-19 and -7.6% from 2015-16 to 2018-19. Enforced mandates contribute positively and significantly to the maintenance of school librarian staffing levels over time (Kachel, 2021).

⁵ Be aware that many of these state context conditions change constantly.

Chart 6

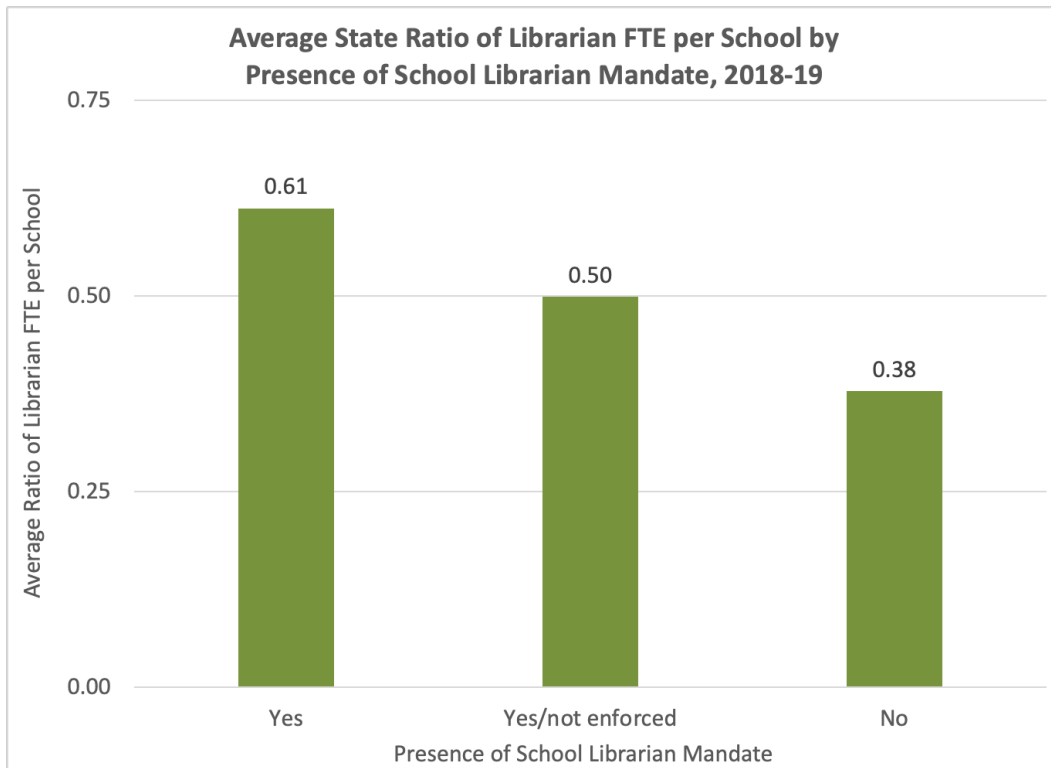
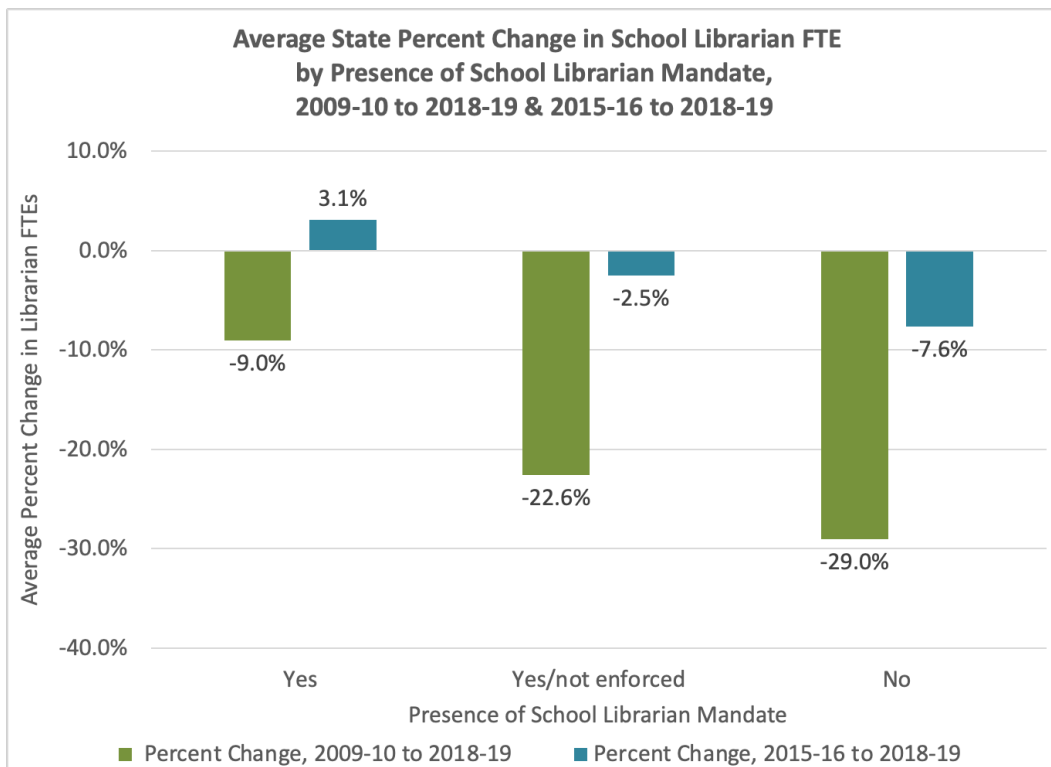


Chart 7

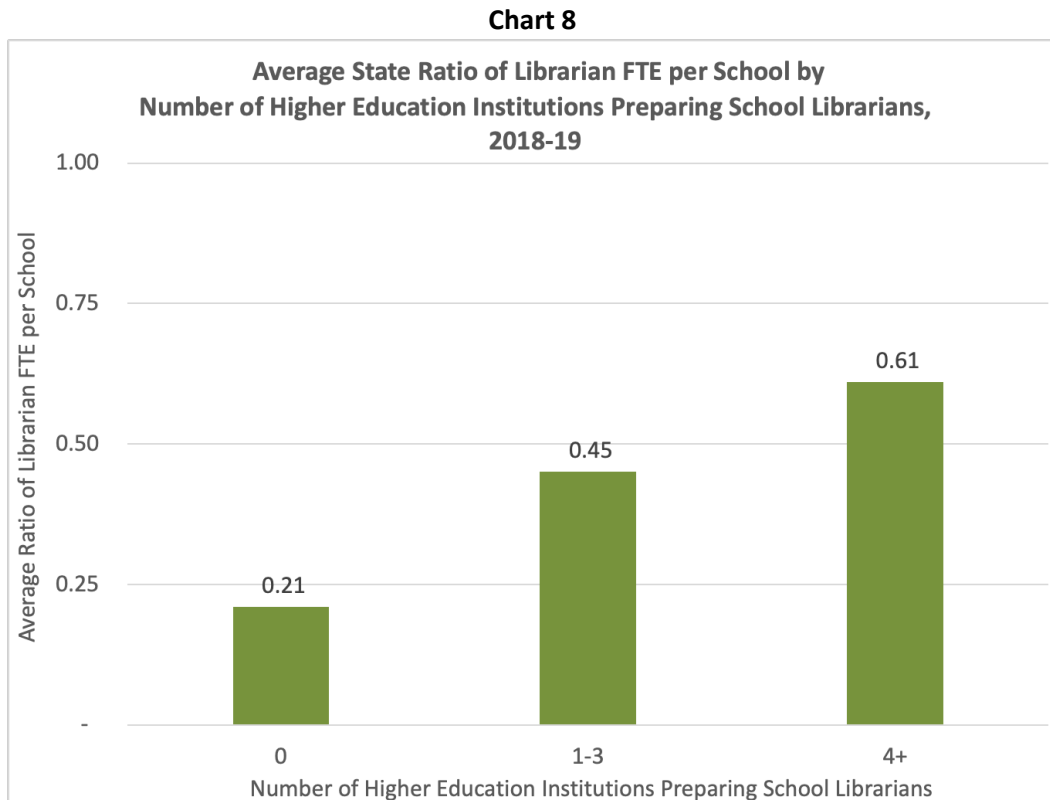


Higher Education Institutions Preparing School Librarians

Higher education institutions that prepare school librarians probably draw most of their students from their own states. Certification requirements for school librarians and their approved preparatory programs vary from state to state (Kachel & Lance, 2021). For this reason, among others, it is not surprising that the analysis of NCES state data with SLIDE's 2020 state survey data revealed that a state's number of higher education institutions preparing school librarians correlated positively and significantly with school librarian employment. (See Chart 8.)

Does a state's number of higher education institutions preparing school librarians help to predict the level of school librarian employment or its change over time?

Based on the 2020 survey, states with 4 or more higher education institutions preparing school librarians averaged 0.61 librarian FTE per school in 2018-19. States with 1 to 3 such institutions averaged 0.45 librarian FTE per school, and states with no such institutions averaged 0.21 librarian FTE per school.



School librarians were more prevalent and less likely to experience job loss in states with more institutions of higher education preparing school librarians.

Like school librarian mandates, the number of higher education institutions preparing school librarians is also a predictor of change in librarian employment over time, both from 2009-10 to 2018-19 and from 2015-16 to 2018-19. (See Chart 9.) States with 4 or more such institutions averaged librarian losses of -17.9% over the decade and -1.7% since 2015-16, while states with 1 to 3 such institutions average losses of -22.5% over the decade and -4.1% since 2015-16. States with no higher education institutions preparing school librarians averaged librarian losses of -36.5% over the decade and -5.7% since 2015-16.

The relationships between school librarian staffing levels and their change over time and the number of higher education institutions preparing school librarians confirm that potential school librarians were more likely to be employed—and to remain employed over time—if there were more institutions to choose from for both initial preparation and ongoing professional development opportunities.

Chart 9

