

# Private School Capacity: 50 State Analysis Using NCES Private School Universe Survey Data

[Updated Using 2014-16 NCES Data]

#### **Author Bio**

James V. Shuls, Ph.D., is an assistant professor of educational leadership and policy studies at the University of Missouri – St. Louis. He is also a distinguished fellow of education policy at the Show-Me Institute, where he previously served as director of education policy. Shuls earned his Ph.D. in education policy from the University of Arkansas. He holds a bachelor's degree from Missouri Southern State University and a master's degree from Missouri State University, both in elementary education. Prior to pursuing his doctorate, James taught first grade and fifth grade in southwest Missouri. His work has been featured in numerous media outlets, including: *Education Week, Education Economics, Educational Policy, Phi Delta Kappan, Social Science Quarterly, The Rural Educator*, and the *Journal of School Choice: International Research and Reform,* where he serves on the editorial board. In 2017, Shuls served as an expert witness in the school finance lawsuit, *Martinez/Yazzie v. New Mexico*.

#### Introduction

Many private schools are operating below capacity. For whatever reason, their enrollment is less than the number of students they could serve. Using data from the Private School Universe Survey, conducted by the National Center for Education Statistics, I estimate that roughly 1.15 million seats sat empty in private schools in 2016. These available seats are not just an opportunity for growth in the private school sector; they represent opportunities for students to attend a school of his or her choice.

This paper highlights how many available seats there are in each state. Of course, it should be noted that this study cannot assess the quality of the schools. It is possible for a school to have vacant spots because they are not adequately serving students. It is also possible, however, that high quality schools have the capacity to serve more students, but are unable to do so because of cost barriers. Again, this paper cannot address these issues. Rather, the purpose here simple—to assess how many available seats remain in each state.

### Methodology

Every other year, the National Center for Education Statistics releases data from the Private School Universe Survey (PSUS). The most recent data comes from the 2015-2016 school year. These data contain a wealth of information, including student enrollment. For this analysis, data were obtained for every PSUS cycle since 1999-2000, ten cycles. Every school in the dataset has a unique identifier, which makes it possible to match school records from one year to the next.

Using these data, each private school's highest enrollment over the 14 year period was identified. The most recent year's enrollment, 2016, was subtracted from this figure to produce the number of *available seats* for each school. This simple calculation assumes that the highest enrollment for a school is the maximum number of students the school can hold, capacity. There are two potential problems with this assumption. First, school administrators may have determined they were enrolling too many students and decided to purposely reduce enrollment. In this instance, the number of available seats would be overestimated. Conversely, schools may have more capacity than their highest enrollment. In this case, the estimate of available seats would be underestimated. Though the former is possible, the latter is more likely. As a result, assuming that the highest enrollment

\_

<sup>1</sup> https://nces.ed.gov/surveys/pss/pssdata.asp

is the maximum enrollment may produce conservative estimates of the number of available seats.

Another potential source of bias in the estimates results from private school response rates. The survey is voluntary. Compared to many surveys, the response rate is relatively high. In 2011-12 for example, the response rate was approximately 92%. Moreover, not every school participates in the survey every cycle. Some schools may not appear in the data because they have closed. Others may not appear because administrators did not complete the survey. There is no way of knowing which it is. As a result, some data are missing and a judgement call must be made on which schools to include in the analysis.

For this analysis, only schools that appeared in one of the past two PSUS cycles, 2013-14 or 2015-16, were included. This method could potentially include some schools in the analysis which have since closed their doors. It could also eliminate some schools that remain in operation, but haven't completed the survey in recent years. If an operating school is not included in the analysis, the estimates would be biased downwards. Including a closed school in the analysis would have the opposite effect. This, however, should not be considered a major problem. After all, the purpose of the paper is to estimate capacity in the private school market. If a school has recently closed, they leave a building and a foundation from which a new school could emerge. Indeed, a private school choice program may stimulate the market and incentivize the school to reopen. Nevertheless, including only schools that have appeared in recent iterations of the PSUS will likely lead to a more conservative estimate of available seats.

It should be noted that not every school included in the analysis had data for the 2016 survey cycle. If a school appeared in the 2014 data, but not in the 2016 data, the school's current enrollment was imputed from 2014. This too could possibly lead to bias in the estimates, although here it is not clear in which direction.

Once the number of available seats was generated by subtracting 2016 enrollment from the highest enrollment over the past 16 years, schools in the first percentile of available capacity were removed from the data. This was done for each state, not for the data set as a whole. After all, the top one percent in Wyoming does not even come close to the top one percent in California. This step is an important method for removing outliers which may have been present because of errors in data entry, rather than from a true difference in enrollment patterns. For example, an administrator may have accidently hit an extra button one year. As a result, a school that regularly has an enrolment around 200 might appear to have an

enrollment around 2,000 students one year. This would yield approximately 1,800 available seats, when no such seats exist.

A new table is included in this updated analysis. It presents the number of available seats in Catholic schools. Here, I do not differentiate between diocesan, parochial, and other private Catholic schools. All schools that indicated they were Catholic were included in the analysis. Using the same methods as previously described, I simply summed the number of available seats in Catholic schools.

## **State Capacity and Rankings**

State	Available Seats 2014 Analysis	Available Seats 2016 Analysis	Ranking 2014	Ranking 2016	State	Available Seats 2014 Analysis	Available Seats 2016 Analysis	Ranking 2014	Ranking 2016
Alabama	17,692	16,028	20	23	Nebraska	9,174	8,930	32	32
Alaska	1,809	1,731	49	49	Nevada	3,334	3,000	43	43
Arizona	11,225	10,986	29	27	New Hampshire	7,367	7,655	33	33
Arkansas	6,447	5,489	34	38	New Jersey	44,083	42,890	8	9
California	149,240	141,910	1	1	New Mexico	6,239	6,691	35	34
Colorado	13,922	13,137	25	26	New York	97,258	95,118	2	2
Connecticut	13,788	14,308	26	25	North Carolina	20,789	20,217	19	19
Delaware	5,933	6,000	38	37	North Dakota	1,971	2,066	48	48
Florida	69,618	64,055	5	5	Ohio	53,975	53,208	6	6
Georgia	23,438	23,215	16	17	Oklahoma	4,426	3,442	40	42
Hawaii	6,046	6,681	37	35	Oregon	9,771	9,756	30	30
Idaho	2,445	2,515	45	45	Pennsylvania	73,509	65,415	4	4
Illinois	76,936	76,785	3	3	Rhode Island	6,172	6,120	36	36
Indiana	22,049	21,002	18	18	South Carolina	15,738	15,395	24	24
Iowa	11,536	10,973	28	28	South Dakota	2,217	2,315	47	46
Kansas	9,601	9,122	31	31	Tennessee	17,690	16,671	21	22
Kentucky	16,978	17,112	23	21	Texas	46,505	49,364	7	7
Louisiana	28,432	30,176	13	12	Utah	4,559	5,123	39	39
Maine	3,920	3,961	42	40	Vermont	2,633	2,808	44	44
Maryland	35,832	34,680	10	10	Virginia	28,061	27,513	14	15
Massachusetts	25,411	27,672	15	14	Washington	17,075	17,319	22	20
Michigan	43,193	44,940	9	8	West Virginia	3,952	3,688	41	41
Minnesota	23,124	24,128	17	16	Wisconsin	34,157	34,499	11	11
Mississippi	11,953	10,607	27	29	Wyoming	1,179	1,057	50	50
Missouri	28,456	28,359	12	13	Wash. D.C.	1,903	2,677		
Montana	2,273	2,121	46	47	Total	1,175,034	1,150,630		

## **Available Catholic Seats in 2016**

State	Available Catholic	Percent of Seats	State	Available Catholic	Percent of Seats	
State	Seats	Available	State	Seats	Available	
Alabama	2,720	17%	Nebraska	5,712	64%	
Alaska	292	17%	Nevada	304	10%	
Arizona	3,976	36%	New Hampshire	3,325	43%	
Arkansas	1,540	28%	New Jersey	25,293	59%	
California	50,976	36%	New Mexico	1,848	28%	
Colorado	4,620	35%	New York	57,240	60%	
Connecticut	8,749	61%	North Carolina	2,823	14%	
Delaware	2,279	38%	North Dakota	1,631	79%	
Florida	17,343	27%	Ohio	39,689	75%	
Georgia	2,851	12%	Oklahoma	810	24%	
Hawaii	2,668	40%	Oregon	1,976	20%	
Idaho	452	18%	Pennsylvania	33,554	51%	
Illinois	48,509	63%	Rhode Island	4,219	69%	
Indiana	10,438	50%	South Carolina	2,335	15%	
Iowa	7,548	69%	South Dakota	1,442	62%	
Kansas	5,931	65%	Tennessee	3,081	18%	
Kentucky	10,424	61%	Texas	16,699	34%	
Louisiana	18,880	63%	Utah	1,390	27%	
Maine	1,135	29%	Vermont	1,021	36%	
Maryland	13,590	39%	Virginia	5,262	19%	
Massachusetts	16,597	60%	Washington	5,231	30%	
Michigan	22,167	49%	West Virginia	1,711	46%	
Minnesota	15,566	65%	Wisconsin	18,184	53%	
Mississippi	2,504	24%	Wyoming	354	33%	
Missouri	17,276	61%	Wash. D.C.	668	25%	
Montana	985	46%	Total	525,464	46%	