

Missing Kids Project README

About the project

This project is a collaboration between Stanford University, [Big Local News](#) and the Associated Press. We worked together to answer the question: [What happened to the kids who left public school during the pandemic?](#)

To answer this question, we collected data at the state level for all public schools, private schools in 35 states and homeschooling in 33 states. There were eight additional states that had incomplete private or homeschool data, where some years were missing or a significant part of the student population was not included.

The enrollment data covers three school years: 2019-20, 2020-21, 2021-22. We also provide Census population estimates for the school-age population in each state during this same period. The summary file has data aggregated for each state and includes our “missing kids” analysis. The detailed files breakdown data by grade or age, where available. More details about each data set with important notes, caveats and sourcing, can be found below.

Our analysis found that in the 21 states plus D.C. with available data, homeschool enrollment grew by 30 percent and private-school enrollment by 4 percent. Taken together, the increase in nonpublic enrollment explains about 40 percent of the public-school enrollment loss. Decreases in the school-age population account for another 26 percent. That leaves about a third of the public-school decline as unexplained -- students who may be skipping kindergarten, in unregistered homeschooling, truant/unschooled, etc.

All cleaned and processed data files have been made available on [Stanford's Digital Repository](#).

Summary data

Missing-Kids-Summary-File.xlsx

This spreadsheet contains state-level summary statistics. All of the data was aggregated from the detailed files collected for this project. There are three tabs in the spreadsheet:

Missing Kids Analysis - This includes the 21 states (plus the District of Columbia) where we had reasonably complete data on private school and homeschool enrollment. This set of states was the foundation of the analysis. The public, private and homeschool enrollment changes were all calculated from the school year 2019-20 to 2021-22. The school-aged population change relied on estimates from April 2020 and July 2021. The residual column shows the total enrollment change (public + private + homeschool) minus the population change.

Enrollment Changes - Shows the raw enrollment data collected in all 50 states and the District of Columbia. We calculated the total change and percent change in enrollment for all states. States that did not provide private or homeschool enrollment data will have NA for that year.

School-Aged Population Changes - Shows the raw school-aged (5-17) population estimates from the census for all 50 states and the District of Columbia. We calculated the total change and the percent change in population for all states.

Public school data

public-enrollment-by-grade.csv

This file contains public school enrollment for each state down to the grade level for fall 2019, fall 2020 and fall 2021. For 47 states, the source of the data is the NCES Common Core Data (CCD), preliminary data (version 0a). In three states, Colorado, Pennsylvania and Washington, we used enrollment data directly from local state agencies. In Colorado's case, the state changed the way it reported enrollment data to the federal government (see homeschool notes below), so it was more consistent to use state-reported data. In Pennsylvania's case, we viewed the fall 2021 data reported by the state agency as more credible than the CCD data, which was preliminary data. In Washington's case, the state did not meet the federal deadline to submit the fall 2021 data for inclusion in the CCD. In CO, PA and WA, we used enrollment data as reported by the state agency for all three years.

The data show enrollment for individual grades starting with kindergarten through 12th grade. Pre-kindergarten enrollment has been excluded. There is an aggregate enrollment total for all grades called "k-12-total".

Data sources:

[NCES Common Core Data](#) (State Nonfiscal Membership files)

[Colorado Department of Education](#) (Pupil Membership data)

[Pennsylvania Department of Education](#) (Consolidated Public School Enrollment file)

[Washington Office of Superintendent of Public Instruction](#) (Report Card Enrollment files)

Population data

population-by-age.csv

This file contains estimates of the school-age resident population aged 5 to 17 for each state and the District of Columbia on April 1, 2020, July 1, 2020, and July 1, 2021.

These data are based on the U.S. Census Bureau's "Vintage 2021" estimate series, which is the latest available as of this date and "is developed from a base that incorporates the 2020 Census, Vintage 2020 estimates, and 2020 Demographic Analysis estimates." Specifically, these data are based on "SC-EST2021-ALLDATA6: Annual State Resident Population Estimates for 6 Race Groups (5 Race Alone Groups and Two or More Races) by Age, Sex, and Hispanic Origin: April 1, 2020 to July 1, 2021" file which was released by the U.S. Census Bureau in June 2022.

See [raw data](#) and [documentation](#) from the Census Bureau.

Private school data

private-enrollment-by-grade.csv

This file contains private school enrollment for three school years: 2019-20, 2020-21, 2021-22. Where available, the data is broken down by grade level, otherwise just annual totals are given.

The data on private school enrollment was collected by searching on state Department of Education websites, filing public records requests and contacting state DOE spokespeople. Notes are below with links to the original source data when available.

State	Data granularity	Link to Raw Data	Notes
Arkansas	By school	https://adedata.arkansas.gov/statewide/ReportList/Schools/PrivateSchools.aspx	State has no requirements for accreditation/registration/licensing/approval of private schools (see here), so this list does not include every private school in the state. Spokesperson from the department of education could not tell us what share of private schools are included. Data has grade ranges per school but not the specific grades, so the totals include pre-school (marked as pk_12_total in the cleaned datasheet.)
California	By grade	By year here and by grade here	Private schools and homeschools are counted together. Schools with fewer than six students are assumed to be homeschools.
Colorado	By grade	https://www.cde.state.co.us/cdereval/pupilcurrentnonpublic	Data is self-reported by private schools and cannot be independently verified by the Colorado Department of Education. IMPORTANT NOTE: Colorado changed the way that it reported public school enrollment data to the federal government in 2021, which impacted our calculations. We revised the number of missing students in Colorado from 15,023 to 9,102.
Connecticut	By grade	https://public-edsight.ct.gov/Students/Enrollment-Dashboard/Nonpublic-School-Enrollment-and-Staff-Counts?language=en_US	"Collection Year" is the fall of the school year (e.g., 2021 refers to SY2021-22). Kindergarten includes full day, half day and extended day.
Delaware	By grade	https://education.delaware.gov/families/k12/homeschools-and-private-schools/annual-reporting/	Private schools, single-family homeschools, and multi-family homeschools are counted separately. Race data is also available. Data includes residents and non-residents of Delaware.

Florida	By grade	https://www.fldoe.org/schools/school-choice/private-schools/annual-reports.stml	Note from the report: "The Private School Annual Reports contain student enrollment data and statistical information for private schools that complete the annual survey. The Department of Education does not verify the accuracy of the data submitted pursuant to the annual survey."
Georgia	By grade	Uploaded to the Big Local News (BLN).	
Hawaii	By grade	PDFs available for 2019/2020 here , 2020/21 here , and 2021/22 here .	While the state department of education does not have this data, the Hawaii Council of Private Schools is required to publish an annual report for all licensed private schools (licensing is optional but strongly recommended.)
Illinois	By grade	https://www.isbe.net/nonpublicprograms	For privacy purposes, the state suppresses data values where the enrollment is between 0 and 10 students. Therefore, we cannot calculate the true total K-12 enrollment. We have total PK-12 enrollment and we can estimate K-12 enrollment by subtracting students in preschool. However, that would be an overestimate, because we wouldn't be able to subtract the masked values. Therefore, Illinois is not included in the list of states for which we have K-12 private school enrollment. The estimated K-12 enrollment is marked as "k_12_estimate" in the cleaned data sheet.
Indiana	By grade	https://www.in.gov/doi/data-center-and-reports/	Data only includes students in accredited private schools.
Iowa	By grade, school	https://educateiowa.gov/data-reporting/education-statistics-pk-12#Student_Enrollment	Enrollment information is available for accredited nonpublic schools (accreditation is required, see here), with a few exceptions for specially accredited private schools. Seventeen private schools did not report data in 2020 (out of 183) and their names are listed in the data. There is a note that some schools did not report data in 2021 but the Excel file does not say how many. Note that slightly different enrollment numbers are listed on the page for certified enrollment ; we went with the data that broke down enrollment by grade.
Kansas	By grade and school	https://datacentral.ksde.org/report_gen.aspx	Statewide totals available online; totals by grade were provided via public record request. The totals include a very small number (<18 per year) of special education 3- and 4-year-olds.

Louisiana	By parish	Uploaded to BLN	See note on homeschools below.
Maryland	By grade	PDFs available here for fall 2021 , here for fall 2020 , and here for fall 2019 .	Enrollment counts are voluntarily self-reported by private schools.
Massachusetts	By town, grade	By town here and by grade here .	We have filtered out grades marked as "Grade 13" or "SP."
Michigan	By grade	Uploaded to BLN	
Minnesota	By grade, district and school	https://public.education.mn.gov/MDEAnalytics/DataTopic.jsp?TOPICID=2	
Montana	By grade bands	Uploaded to BLN	The data goes back to 1990. There are columns for Kindergarten (KG), 1-8, 9-12, and total. Beginning in 2018-2019 the way data was recorded changed from KG and 1-8 to KG-8, so KG became NA. The cleaned datasheet lists grades 8 and below as "ungraded_elementary_middle" and grades 9-12 as "undegraded_high_school."
Nebraska	By grade	Uploaded to BLN	
Nevada	By grade	https://doe.nv.gov/Private_Schools/	From the Nevada Department of Education website: "Private schools must be licensed by the NDE and most private schools must submit paperwork every other year in order to keep the license current."
New Hampshire	By grade, town	https://www.education.nh.gov/who-we-are/division-of-educator-and-analytic-resources/bureau-of-education-statistics/home-schooled-and-nonpublic-enrollments	In 2021, "special education elementary" and "special education secondary" were treated as separate grades.
New Jersey	Statewide	Uploaded to BLN	The data provided by the state includes grade totals for residents and non-residents. We have counted both. Note from a New Jersey Department of Education spokesperson: "NJDOE doesn't oversee or monitor all nonpublic schools throughout the State. Only those nonpublic schools that receive services through state and federal programs are required to register with the NJDOE. Also note that the figures do not include approved private

			schools for students with disabilities (APSSDs), which educate public-school students. As such, our enrollment count is not the total universe of nonpublic students, only those from nonpublic schools registered with the NJDOE."
New York	By grade	https://www.p12.nysed.gov/irs/statistics/nonpublic/	Not clear what share of private schools report this info to the state.
North Carolina	By grade	https://ncadmin.nc.gov/public/private-school-information/state-north-carolina-private-grade-k-12-school-statistics	
North Dakota	By grade	Uploaded to BLN	
Ohio	By grade, race, school	Available here and here	Data includes out-of-state residents in Ohio private schools; 99% of students are in-state residents.
Pennsylvania	By grade, school	https://www.education.pa.gov/DataAndReporting/Enrollment/Pages/PrivateNPEnrRpts.aspx	"Fully publicly funded" refers to public placements of students enrolled in private schools where tuition is paid with public funds. Students in these schools are considered public school students. "Private pay" refers to private, parental placements where tuition is paid by the parent. We are NOT including "fully publicly funded" in the count of private schools, only private pay. Data includes non-residents who attend PA schools and a small number of residents who attend out-of-state schools; the original datasheet to find the breakdown of resident vs. non-resident. Kindergarten is divided into K4 and K5, and 7th/8th grade are sometimes classified as secondary or elementary depending on the school.
Rhode Island	By grade	Uploaded to BLN	All Rhode Island non-public schools that serve children in grades K-12 must be approved annually by the Rhode Island Department of Education (see regulations here).
South Carolina	By grade	https://ed.sc.gov/data/other/student-counts/private-school-headcount-s/ (2021-22 uploaded to BLN)	Private schools are required to report enrollment to county superintendents. However, the fine for not reporting is only \$25). Thirty-three Catholic schools in 2021 did not report by grade, just by totals.
South Dakota	By grade	https://doe.sd.gov/ofm/enrollment.aspx	

Tennessee	Statewide (totals by school available on TN.gov website for the latest school year)	https://www.tn.gov/education/school-options/non-public-schools.html	Nonpublic totals for both May and December of each year are uploaded to BLN. Data does not show grades but does show church-related private schools vs. other private schools.
Texas	Statewide	NA	Only partial data is available. The Texas Education Agency doesn't track private school enrollment, but the Texas Private School Association was able to give me some data for 2019-20 and 2021-22. No data is available for 2020-21. The data includes K-12 students in accredited non-profit private schools. Accredited for-profits are generally child care centers; it is unknown how many unaccredited private schools there are as no registration is required, but the majority of private schools are accredited.
Vermont	By school	Uploaded to BLN	Only partial data is available. The Vermont Department of Education said it doesn't keep track of this information, even though independent schools are required to submit enrollment numbers . However, it did provide 2021-22 and 2020-21 directories with enrollments. Enrollments were missing for some schools. The directory also included schools for students with disabilities; it is unclear if enrollments may include students who are placed into private school at public expense. A spokesperson said there was no directory available for 2019-20.
Washington	By grade	https://www.sbe.wa.gov/our-work/private-schools#Private%20School%20Enrollment	
West Virginia		NA	Enrollment numbers came from a West Virginia Department of Education spokesperson, via email.
Wisconsin	By grade	https://dpi.wi.gov/wisedash/download-files/type?field_wisedash_upload_type_value=Enrollment-Private-School&field_wisedash_data_view_value=All	
District of Columbia	District-wide	Uploaded to BLN	

Homeschool data

The data on homeschool enrollment was collected by searching on state Department of Education websites, filing public records requests and contacting state DOE spokespeople. Notes are below with links to the original source data when available.

State	Data Granularity	Link to Raw Data	Notes
Alaska	By district	Uploaded to Big Local News repository (BLN)	The data includes correspondence homeschool programs operated either at the district or state level; other homeschool data is not collected. Anecdotally, however, correspondence programs are very common since they reimburse for costs.
Arkansas	By county, district, gender, grade	https://dese.ade.arkansas.gov/Offices/learning-services/home-school/home-school-reports	Data also shows percent of each district that is homeschooled. Data for 2021-22 comes from an email from an Arkansas Department of Education spokesperson in March 2022; she noted that the number changes daily until June 15. Although the private school data is for PK-12, the homeschool data is for grades K-12.
California		https://www.cde.ca.gov/ds/si/ps/psastatcountsbyyear.asp	Private schools with fewer than six students are presumed to be homeschools.
Colorado	By district	https://www.cde.state.co.us/cdereval/2021-2022/homebasededucation	IMPORTANT NOTE: These numbers only include students who are 100% homeschooled. Students who are partially homeschooled but also still receive public school services or take public school classes are counted as public school students. Colorado changed the way that it reported public school enrollment data to the federal government in 2021, which impacted our calculations. We revised the number of missing students in Colorado from 15,023 to 9,102.
Delaware	By grade	https://education.delaware.gov/families/k12/homeschools-and-private-schools/annual-reporting/	Data is available by grade for 2020-21 onward. We counted single-family and multi-family homeschools together, and we also counted "All Student Enrollment" rather than "DE Student Enrollment" (there was almost no difference.)
Florida	By district	PDFs for 2021/22 here , 2020/21 here , and 2019/20 here . See also the latest annual report posted here .	

Georgia	By county	Uploaded to BLN	State had 67,562 homeschool students verified for SY23 as of 8/25/22. Parents must notify DOE within 30 days of establishing homeschool and by September 1 each year after. While the spreadsheet says that “this data reflects only electronic submissions,” a Department of Education spokesperson clarified that non-electronic submissions are also included in the data.
Hawaii	By district, complex area	Data came via email from a State Department of Education spokesperson.	It shows homeschool students newly acknowledged by a school and is not a tally of all home-schooled students. As long as parents are complying with the annual progress monitoring requirement, they do not have to resubmit the notification of intent to home-school their child on an annual basis.
Indiana		Data came from a Department of Education spokesperson.	Data only includes students withdrawing from public school that year and is not a tally of all homeschooled students.
Iowa		Data came from a Department of Education spokesperson.	Data does not include all homeschooled students. It only includes homeschool students who participate in a home school assistance program or who are involved in the district in some capacity (e.g. enrolled in school courses, receiving special education services, taking state standardized tests). Spokesperson said data can be broken down by district, race, gender, age if requested.
Kentucky		Data came from a Department of Education spokesperson.	
Louisiana	By parish	Uploaded to BLN	INTERPRET DATA WITH CAUTION. Louisiana has three forms of nonpublic schooling: approved private schools, registered private schools NOT seeking state approval, and approved home study programs. There are some doubts as to the veracity of the data on unapproved private schools, as the state has very little oversight over these schools. In addition, there is a possibility that students were double-counted, appearing in both home study programs and unapproved private schools. Students who attend an

			<p>unapproved private school do not receive a state-recognized diploma and are not eligible for certain college scholarships; therefore it is possible that parents may enroll students in both an approved home study program and a private school. We have chosen to count enrollment in unapproved private schools as a form of homeschooling. We conducted the analysis both with and without the unapproved private schools, and our overall national results were similar either way. For reference, enrollment in Louisiana registered private schools NOT seeking state approval: 17,978 in October 2019; 18,114 in October 2020; 19,088 in October 2021. Enrollment in Louisiana approved home study programs: 13,672 in 2019; 15,107 in 2020; 16,134 in 2021.</p>
Maine	By age, district	https://www.maine.gov/doe/data-reporting/reporting/warehouse/enrollment	<p>The datasheet "home instruction counts by district" on the DOE website shows 6,775 homeschool students in 2019; 12,044 in 2020; and 10,871 in 2021. "Home instruction counts by age" shows 6,764 students in 2019, 12,086 in 2019, and 10,929 in 2021. We went with the district data for totals.</p>
Massachusetts		https://profiles.doe.mass.edu/statereport/schoolattendingchildren.aspx	
Michigan		Data came from a Department of Education spokesperson.	<p>Homeschool registration is not required by law in Michigan, so there is no mechanism to verify those numbers accurately reflect enrollment in homeschooling in any given year. The numbers are therefore a large undercount.</p>
Minnesota	By age, district	Uploaded to BLN	<p>Data includes ages 5-18. Parents, however, are not required to report before age 7. The data includes "compliant" and "noncompliant" homeschoolers (those who do not fully comply with reporting requirements.)</p>
Mississippi		Uploaded to BLN	<p>The data is collected in May of each school year.</p>
Missouri		Data came from a Department of Education spokesperson.	
Montana	By county,	Uploaded to BLN	

	grade		
Nebraska		Data came from a Department of Education spokesperson.	
New Hampshire	By district	https://www.education.nh.gov/who-we-are/division-of-educator-and-analytic-resources/bureau-of-education-statistics/home-schooled-and-nonpublic-enrollments	
New Jersey	Statewide	Data came from a Department of Education spokesperson.	The state does not keep track of homeschool students, so the numbers only include students who transferred from public to homeschool during each school year, and do not take into account students who transferred back to public school or never went to public school. The data includes anyone who transferred at any point of the school year. Numbers for students who only transferred between 7/1 and 10/15 of a given school year are: fall 2016: 1,132. Fall 2017: 1,367. Fall 2018: 1,159. Fall 2019: 1,295. Fall 2020: 5,326.
New Mexico	By district	Data came from a Department of Education spokesperson.	One of the journalists working on this project received two spreadsheets in March 2022 and April 2022 that contained conflicting data. Another journalist requested the data again in December and received another spreadsheet that did not match either of the two previously. We include the latest version of the data that we received, but readers might want to interpret the data with caution.
New York	By district	https://www.p12.nysed.gov/irs/statistics/HomeSchooled/home.html	
North Carolina	By county, age, grade	https://ncadmin.nc.gov/public/home-school-information/home-school-statistics	
North Dakota	By district	Uploaded to BLN	File uses fall enrollment data.
Ohio	By district	https://education.ohio.gov/Topics/Ohio-Education-Options/Home-Schooling	
Oregon	By district	Uploaded to BLN	
Pennsylvania	By county and by ages 5-11 and 12+.	https://www.education.pa.gov/DataAndReporting/HomeSchool/Pages/default.aspx	Pennsylvania students may receive private tutoring from a certified teacher. We did not count this as homeschooling.

Rhode Island	By grade, district	Uploaded to BLN	It is not clear if the data is collected on a rolling basis or on a Census date, but a representative from the Department of Education said that shouldn't make much of a difference.
South Carolina	NA	https://ed.sc.gov/data/other/student-counts/home-schooling-headcounts/	Homeschooling numbers are collected via a winter survey; must be submitted by January 30th of the school year.
South Dakota	By district, grade	https://doe.sd.gov/ofm/enrollment.aspx	The numbers for 2021-22 were provided via email and are up to date as of December 2021. A Department of Education spokesperson said, "Following the passage of legislation in 2021 , the state moved to a new way of collecting homeschool data." However, it is unclear what that change entailed or how it affected the numbers.
Tennessee	By grade	Uploaded to BLN	A Department of Education spokesperson provided data for both December and May collection dates; see BLN website for both. We used the data from December.
Texas		Data came from a Department of Education spokesperson.	Data only includes students who left for homeschool that school year. Data on 2019-20 and 2021-22 is missing.
Vermont		Data came from a Department of Education spokesperson.	
Virginia	By district, grade band	https://www.doe.virginia.gov/data-policy-funding/data-reports/statistics-reports/enrollment-demographics/home-schooled-students-religious-exemptions	We did not include religious exemptions from school, which are counted separately (there is no overlap with homeschool and religious exceptions.)
Washington	By county, districts	https://www.k12.wa.us/student-success/learning-alternatives/home-based-instruction	
Wisconsin	By grade, county, district	https://dpi.wi.gov/parental-education-options/home-based/statistics	

Wyoming		Data came from a Department of Education spokesperson.
District of Columbia	By district	Uploaded to BLN

Downloading raw data from BLN

All of the original data files we collected for private schools and homeschools are stored on the Big Local News platform. To download the raw data, go to <https://biglocalnews.org> and login. If you don't have an account, click SIGN UP to create a free account. Once logged in, go to Open Projects and search for the project called "Private School and Homeschool Enrollment Raw Data" or click this [link](#).

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Attribution

The school enrollment data gathered for this project are made available under the [Open Data Commons Attribution License](#). When using or referring to the data in publications, please cite Big Local News of Stanford University.