

Uncertified Teachers and Teacher Vacancies by State

To understand how states and districts are experiencing teacher shortages around the country, the Learning Policy Institute reviewed teacher workforce reports to estimate by state the number of teachers not fully certified for their teaching assignments. State laws typically specify that such teachers can be hired or assigned only if a fully certified teacher is not available. Therefore, these data provide a strong indicator of the severity of shortages.

The table below uses available data on the most recent workforce figures from 40 states.¹ LPI used the most recent single year of data for each state—either 2015–16 or 2016–17—with descriptions that give a state-specific explanation of the information and a link to the data source.

We refer to these data as the “minimum number of teachers not fully certified for their teaching assignments” because state data often underestimate total shortages. For example, some states report uncertified teachers only in core academic areas rather than in all subjects, and other states report tallies from surveys that represent a subset of districts in the state. In addition, we acknowledge that these data also most likely underrepresent the extent and impact of shortages because districts often address shortages by canceling courses, increasing class sizes, or starting the school year with substitute teachers.

Where possible, we also collected the number of unfilled vacancies to help estimate the impact of shortages beyond uncertified teachers in the classroom. For example, Florida does not report the number of uncertified teachers in the state, but it does report unfilled vacancies on the first day of school—in 2016–17, that number was 2,111.

State	Year	Minimum Number of Teachers Not Fully Certified for Their Teaching Assignments	Unfilled Vacancies	Total Number ² of Teachers in the State (2014–15 CCD) ³	Data Description	Sources
Alabama	2015–16	886	—	42,737	In the 2015–16 school year, Alabama employed 291 teachers on emergency certificates and an additional 595 teachers on alternative certificates. This count may underestimate teacher shortages because the state does not report data on teacher vacancies or other actions taken by districts to mitigate shortages (e.g., canceling courses, hiring substitute teachers, and increasing class sizes).	Alabama State Department of Education 2015–16 Quick Facts
Alaska	—	—	—	—	Insufficient data available	—
Arizona	2015–16	1,831	2,476	48,124	In a 2015–16 Arizona School Personnel Administrators Association survey of 130 of the more than 600 districts (216) and charter holders (403) in Arizona, over 4,000 teaching positions were vacant or staffed with an underprepared teacher 4 weeks into the school year. This includes 2,041 vacancies at the start of the school year, 1,831 classrooms filled by individuals not meeting standard teacher requirements, and 435 teachers who left in the first 4 weeks, creating additional vacancies. This count likely underestimates teacher shortages because it is based on survey responses from only 130 of more than 600 districts and charter schools in the state.	Arizona School Personnel Administrators Association survey results

State	Year	Minimum Number of Teachers Not Fully Certified for Their Teaching Assignments	Unfilled Vacancies	Total Number ² of Teachers in the State (2014–15 CCD) ³	Data Description	Sources
Arkansas	2015–16	1,184	339	35,430	An Arkansas Department of Education 2015–16 supply and demand report found that there were 337 vacancies or long-term substitutes serving as the teacher of record. In addition, another 1,184 teachers were teaching on waivers and were not certified for the subject they were teaching. This count may underestimate teacher shortages because the state does not report data on other actions taken by districts to mitigate shortages (e.g., canceling courses, hiring substitute teachers, and increasing class sizes).	Arkansas Department of Education academic shortage areas for 2016–17
California	2015–16	10,209	—	267,685	In 2015–16, California hired 10,209 teachers without full certification to teach their assigned subject areas or grade levels. This count underestimates teacher shortages because other evidence indicates that districts are leaving classrooms vacant, canceling courses, increasing class sizes, and staffing classrooms with substitute and out-of-field teachers.	Addressing California's growing teacher shortage: 2017 update
Colorado	—	—	—	—	Insufficient data available	—
Connecticut	—	—	—	—	Insufficient data available	—
Delaware	—	—	—	—	Insufficient data available	—
District of Columbia	—	—	—	—	Insufficient data available	—
Florida	2016–17	—	2,111	180,442	In 2016–17, Florida recorded 2,111 unfilled vacancies on the first day of school. This count likely underestimates shortages because the state does not report counts of uncertified teachers.	State Board of Education consent item, February 16, 2017
Georgia	—	—	—	—	Insufficient data available	—
Hawaii	2015–16	490	—	11,663	In 2015–16, 382 teachers were teaching without having completed a teacher education program. Of these, 54 were teaching outside of their areas of preparation, 241 had not completed a teacher preparation program, and 87 had not completed a teacher preparation program but were participating in the Teacher for America program. An additional 108 teachers had completed a preparation program but did not have a Hawaii license, with many being out-of-state transfers. This total count may underestimate teacher shortages because the state does not provide data on other actions taken by districts to mitigate shortages (e.g., canceling courses, hiring substitute teachers, and increasing class sizes).	Employment report, school year 2015–16

State	Year	Minimum Number of Teachers Not Fully Certified for Their Teaching Assignments	Unfilled Vacancies	Total Number ² of Teachers in the State (2014–15 CCD) ³	Data Description	Sources
Idaho	2016–17	920	—	15,609	In 2016–17, 920 teachers were teaching on alternative certifications. This count likely underestimates teacher shortages in the state because a 2016–17 survey of 90 districts (amounting to a 78% response rate) found that in order to fill teaching vacancies, 24 districts increased class size instead of hiring, 21 districts canceled courses or programs due to unfilled positions, 29 districts started school with substitutes, 64 districts requested alternative certification from the State Department of Education, and 37 districts requested provisional authorizations.	Alternative authorizations issued by Idaho State Department of Education
Illinois	2015–16	2,700	—	132,456	In 2015–16, 2,700 teachers had not met all the requirements for state certification. This includes those on alternative licenses and out-of-state teachers who had not yet received Illinois certification. This count may underestimate teacher shortages because the state does not report data on teacher vacancies or other actions taken by districts to mitigate shortages (e.g., canceling courses, hiring substitute teachers, and increasing class sizes).	Illinois State Board of Education 2016 annual report
Indiana	—	—	—	—	Insufficient data available	—
Iowa	2015–16	0	—	35,684	In 2015–16, no teachers were on emergency or provisional licenses. This count may underestimate teacher shortages because the state does not report data on teacher vacancies or other district actions to mitigate shortages (e.g., canceling courses, hiring substitute teachers, and increasing class sizes).	Iowa report card for No Child Left Behind
Kansas	2016–17	913	—	37,659	In 2016–17, 3% (or 913) teachers did not hold a valid Kansas teaching certificate/license with the appropriate subject and grade level endorsement for the assignments they held. One-third (or 304) of these teachers were teaching under emergency licenses, called provisional certificates/licenses or waivers. This count likely underestimates shortages in the state because recent data indicate that there were more than 170 vacancies at the start of the 2017–18 school year.	Kansas report card 2016–17

State	Year	Minimum Number of Teachers Not Fully Certified for Their Teaching Assignments	Unfilled Vacancies	Total Number ² of Teachers in the State (2014–15 CCD) ³	Data Description	Sources
Kentucky	2016–17	337	—	41,586	In 2016–17, 337 (or 0.8%) of teachers in Kentucky were on emergency credentials. This count may underestimate shortages in the state because Kentucky does not report data on the number of uncertified teachers, teacher vacancies, or other actions taken by districts to mitigate shortages (e.g., canceling courses, hiring substitute teachers, and increasing class sizes).	Kentucky school report card
Louisiana	—	—	—	—	Insufficient data available	—
Maine	—	—	—	—	Insufficient data available	—
Maryland	2015–16	661	—	59,194	In 2015–16, 1.5% (or 661) teachers were teaching with conditional certificates in Maryland. In addition, 8.9% of courses were taught by teachers defined as “not highly qualified.” Although we do not know the exact number of teachers, these data suggest there are additional teachers in Maryland who are underprepared for the classroom.	2017 Maryland report card
Massachusetts	2016–17	1,874	—	71,859	During the 2016–17 school year, 2.6% (or 1,874) teachers were not licensed for their teaching assignments. This count may underestimate teacher shortages because the state does not report data on other actions taken by districts to mitigate shortages (e.g., canceling courses, hiring substitute teachers, and increasing class sizes).	Massachusetts Department of Elementary and Secondary Education School and district profiles
Michigan	2016–17	1,136	—	85,038	Using data from the 2016–17 school year, the <i>Michigan Annual Education Report</i> reveals that 1.2% (or 1,136) teachers in the state are teaching with emergency certification. This count may underestimate shortages because Michigan reports data only on emergency certificates and not the total number of teachers uncertified for their teaching assignments.	Michigan annual education report
Minnesota	2015–16	1,235	—	55,690	In 2015–16, a total of 1,235 teachers were not licensed and were teaching with special permission. This count may underestimate shortages because the state has not reported Highly Qualified Teacher data for 2015–16, which would provide a better estimate of the total number of teachers uncertified for their teaching assignments.	Minnesota report card

State	Year	Minimum Number of Teachers Not Fully Certified for Their Teaching Assignments	Unfilled Vacancies	Total Number ² of Teachers in the State (2014–15 CCD) ³	Data Description	Sources
Mississippi	2015–16	109	—	32,311	In 2015–16, 109 teachers were teaching on emergency or provisional certifications. This count likely underestimates shortages because the state does not count the total number of teachers not certified for their teaching assignments. Although we do not know the exact number of teachers, we do know that 5.1% of courses in the state are taught by teachers defined as “not highly qualified.” These data suggest there are additional teachers in Mississippi underprepared for the classroom.	Mississippi accountability system annual report card, school year 2015–16
Missouri	2015–16	1,159	—	67,356	In 2015–16, 0.7% of teachers were teaching on temporary or special assignment certificates, and 1% of teachers were teaching with substitute credentials, expired credentials, or no credentials at all. These counts likely underestimates shortages because the state does not count the total number of teachers not certified for their teaching assignments. Although we do not know the exact number of teachers, we do know that 3.8% of courses in the state are taught by teachers defined as “not highly qualified.” These data suggest there are additional teachers in Missouri underprepared for the classroom.	District certification status of teachers
Montana	2015–16	—	785	10,234	In 2015–16, a total of 785 vacancies were reported by public school districts, state-funded schools, and special education cooperatives on the <i>District Personnel Recruitment Report</i> . This count may underestimate shortages because Montana reports data on teacher vacancies, but not data on uncertified teachers.	Critical quality educator shortages
Nebraska	2016–17	206	47	22,988	According to a 2016–17 Nebraska Department of Education Survey of 96% of all public school districts, a total of 206 positions were not filled by a fully qualified teacher, and 46 positions were left vacant. This count may underestimate shortages because the survey leaves out 4% of the state’s districts, which may have hired uncertified teachers or had unfilled vacancies. Also, the state does not report data on other actions taken by districts to mitigate shortages (e.g., canceling courses, hiring substitute teachers, and increasing class sizes).	Teacher vacancy survey report

State	Year	Minimum Number of Teachers Not Fully Certified for Their Teaching Assignments	Unfilled Vacancies	Total Number ² of Teachers in the State (2014–15 CCD) ³	Data Description	Sources
Nevada	2015–16	560	—	21,656	In 2015–16, 560 teachers were not appropriately certified for the subject area they were teaching. This count may underestimate teacher shortages because the state does not report data on other actions taken by districts to mitigate shortages (e.g., canceling courses, hiring substitute teachers, and increasing class sizes).	Nevada report card
New Hampshire	—	—	—	—	Insufficient data available	—
New Jersey	2016–17	4,083	—	115,067	In 2016–17, New Jersey granted 239 emergency certificates and issued 3,844 Certificates of Eligibility, which are granted to individuals who have not completed a teacher preparation program but have met requirements for academic study and applicable test requirements. CE holders are required to complete a teacher preparation program while teaching.	Data request to the New Jersey Department of Education
New Mexico	2016–17	443	—	—	According to a 2016–17 report conducted by the New Mexico State University College of Education STEM Outreach Alliance Research Lab, the state had 443 teacher vacancies in the fall of 2016, leaving those classrooms to be led by long-term substitutes and/or uncertified teachers. Data was collected from all 89 school districts in New Mexico—45 districts responded to a survey request of superintendents, and data was obtained for remaining 44 districts by contacting district personnel and identifying openings using district websites and the New Mexico Regional Education Applicant Placement (NMREAP) website. This count may underestimate shortages, because the state has not reported Highly Qualified Teacher data for 2016–17, which helps provide a better estimate of the total number of teachers uncertified for their teaching assignments.	2016 New Mexico educator vacancy report
New York	2015–16	14,735	—	203,781	In New York, 2% (or 4,210) of teachers had no valid teaching certificate. Seven percent (or 14,735) of teachers were teaching outside of their certification areas. This count may underestimate teacher shortages because the state does not report data on other actions taken by districts to mitigate shortages (e.g., canceling courses, hiring substitute teachers, and increasing class sizes).	New York state report card

State	Year	Minimum Number of Teachers Not Fully Certified for Their Teaching Assignments	Unfilled Vacancies	Total Number ² of Teachers in the State (2014–15 CCD) ³	Data Description	Sources
North Carolina	2015–16	2,007	—	99,320	During the 2015–16 school year, 2% (or 2,007) of teachers were not fully certified—that is, without clear initial or clear continuing licenses—but instead were teaching on lateral entry, alternative, or emergency licenses. This count may underestimate teacher shortages because the state does not report data on other actions taken by districts to mitigate shortages (e.g., canceling courses, hiring substitute teachers, and increasing class sizes).	2015–2016 North Carolina school report cards
North Dakota	2015–16	0	—	9,049	In 2015–16, no courses were taught by teachers on emergency credentials in North Dakota. This count underestimates shortages because the state does not report counts of uncertified teachers. However, it did report that 0.11% of core academic courses in 2015–16 were taught by teachers defined as “not highly qualified.”	North Dakota school plant profile 2015–2016 results
Ohio	2016–17	0	—	106,526	In 2016–17, no courses were taught by teachers on temporary or provisional certification in Ohio. This count underestimates shortages because the state does not report counts of uncertified teachers. However, it did report that 1.7% of core academic courses in 2015–16 were taught by teachers who were not fully certified.	Ohio school report cards
Oklahoma	2016–17	1,160	—	42,073	In Oklahoma, 1,160 emergency credentials were issued in 2016–17. This count may underestimate shortages, because the state has not reported Highly Qualified Teacher data for 2016–17, which helps provide a better estimate of the total number of teachers uncertified for their teaching assignments.	Oklahoma public schools: Fast Facts 2016–17
Oregon	2015–16	832	—	27,850	A state-commissioned report on teacher supply and demand found that Oregon issued 832 provisional licenses (including emergency, expedited, restricted, conditional, limited, or interim licenses) in the 2015–16 school year. This count underestimates shortages, as indicated by the report, which emphasized that the number of provisional licenses serves as only a proxy measure of teacher shortages because it includes neither out-of-field teachers nor unfilled positions at the beginning of the school year.	Understanding and identifying teacher shortage areas in Oregon

State	Year	Minimum Number of Teachers Not Fully Certified for Their Teaching Assignments	Unfilled Vacancies	Total Number ² of Teachers in the State (2014–15 CCD) ³	Data Description	Sources
Pennsylvania	2015–16	1,428	—	122,030	The Pennsylvania Department of Education estimated that in the 2015–16 school year, 1,428 full-time equivalent positions were filled by teachers with emergency permits or were undersupplied by teachers with new certificates. This count likely underestimates shortages because, although it includes the number of emergency permits and additional projected vacancies due to retirement attrition and an undersupply of new teachers, it does not include the total number of teachers uncertified for their assignments, such as teachers on intern certificates or teachers who are defined as “not highly qualified.”	Proposed teacher shortage areas, 2015–16
Rhode Island	2015–16	160	—	9,471	In 2015–16, 1.7% (or 160) of teachers were on emergency certification. In Rhode Island, individuals who do not qualify for full state certification may be granted an emergency certificate to teach in public schools upon written request of the Superintendent of Schools if fully certified applicants are not available. (The Superintendent must advertise for certified candidates in the statewide newspaper and must first contact local colleges and universities with educator-preparation programs.) This count likely underestimates shortages because the state reports data only on emergency certification and not the total number of teachers uncertified for their teaching assignments. In fact, 2% of classes in the state were taught by teachers defined as “not highly qualified” in 2015–16.	Infoworks! Rhode Island Education Data Reporting
South Carolina	2015–16	—	481	49,475	According to the annual teacher supply and demand report based on surveys of South Carolina’s school districts and put out by the Center for Educator Recruitment, Retention, & Advancement, the state had 481 teacher vacancies in 2016–17. These vacancies did not include any spots filled by underprepared teachers, such as teachers on alternative certifications. Therefore, this count likely underestimates teacher shortages.	A report on the fall 2016 Supply and Demand Survey
South Dakota	2016–17	—	69	9,618	At the beginning of the 2016–17 school year, there were 69 vacancies. This count likely underestimates shortages because the state does not report counts of uncertified teachers. South Dakota does not offer emergency or provisional licenses. However, 2.24% of core academic courses were taught by teachers who were “not highly qualified” in 2015–16.	Instructional staff turnover and vacancy and South Dakota DOE 2015–16 report card

State	Year	Minimum Number of Teachers Not Fully Certified for Their Teaching Assignments	Unfilled Vacancies	Total Number ² of Teachers in the State (2014–15 CCD) ³	Data Description	Sources
Tennessee	2015–16	40	—	65,341	When the school system is unable to obtain the services of a qualified teacher, the state will issue permits to temporarily employ a degreed individual who does not hold a valid license. In 2015–16, 40 teacher permits were issued. This count may underestimate shortages because the state has not yet reported Highly Qualified Teacher data for 2015–16, which helps provide a better estimate of the total number of teachers uncertified for their teaching assignments.	State report card
Texas	2015–16	22,791	—	342,257	In 2015–16, 1,478 core academic teachers were teaching on emergency, nonrenewable, or temporary permits. An additional 14,555 were teaching with a probationary certificate while concurrently enrolled in an alternative certification program. A total of 19,998 FTE teachers were assigned outside of the grade level or subject area for which they were credentialed—a count that has gone up to 21,449 in 2016–17. The 2015–16 total does not include the 1,478 permits and the 13,240 of 14,555 probationary certificates considered “highly qualified teachers.” Certificates considered in field only with additional coursework or a specified degree were counted as out of field. Traditional districts and charters were included for the Bilingual/ESL and Special Education areas; for all other subject areas, only traditional districts were included. This count may underestimate teacher shortages because the state does not report data on other actions taken by districts to mitigate shortages (e.g., canceling courses, hiring substitute teachers, and increasing class sizes).	Educator reports and data and Highly qualified teachers reports and equity data surveys
Utah	2015–16	148	118	27,374	In a 2015–16 survey of 31 (out of a total of 41) school districts administered by the Utah School Boards Association, 118 teaching positions were not filled when the school year started. An additional 148 classrooms were staffed by teachers without full certification, including 48 positions filled by substitutes. This count likely underestimates shortages because 10 Utah districts were not surveyed.	Teacher shortages, September 2015
Vermont	—	—	—	—	Insufficient data available	—

State	Year	Minimum Number of Teachers Not Fully Certified for Their Teaching Assignments	Unfilled Vacancies	Total Number ² of Teachers in the State (2014–15 CCD) ³	Data Description	Sources
Virginia	2016–17	6,626	—	89,968	In Virginia, 5% of the teacher workforce is teaching on provisional licenses. Those instructors hold provisional licenses because they either have not yet completed or have not even started their teacher preparation. An additional 2% of the teacher workforce is special education teachers teaching with provisional licenses. A total of 6,626 teachers are on provisional licenses. This count may underestimate teacher shortages because the state does not report data on other actions taken by districts to mitigate shortages (e.g., canceling courses, hiring substitute teachers, and increasing class sizes).	Virginia state quality profile
Washington	2015–16	3,500	—	59,555	Based on an analysis completed by the Office of the Superintendent of Public Instruction in January 2016, the shortfall in needed teachers is expected to be approximately 3,500 teachers annually, if current trends continue. This projected shortfall of teachers might change depending on whether state conditions shift.	Teacher and substitute shortages in Washington state
West Virginia	2016–17	683	—	20,029	In the 2016–17 school year, 683 positions were filled with either a short-term or long-term substitute (which is defined as a vacancy in West Virginia). This count likely underestimates shortages because West Virginia reports only the number of courses taught by long-term and short-term substitutes, and not data on the total number of uncertified teachers.	Data request to West Virginia Department of Education
Wisconsin	2015–16	1,969	—	58,376	In 2015–16, 1,969 emergency licenses and emergency permits were issued in Wisconsin, more than double the number issued in 2013–14. This count may underestimate shortages because the state reports data only on emergency licenses and permits issued, and not the total number of teachers uncertified for their teaching assignments.	Wisconsin Talent Development Framework Project
Wyoming	2015–16	76	—	7,615	In 2015–16, 1% (or 76) of teachers were teaching on provisional certification. This count may underestimate shortages because the state reports data only on provisional certification and not the total number of teachers uncertified for their teaching assignments. In fact, in 2015–16, 1.3% of courses in the state were taught by teachers defined as “not highly qualified.”	Wyoming federal Title I report card

Summary Data

	Number of states reporting data	Total
Minimum number of teachers not fully certified for their teaching assignments	36	87,091 ⁴
Estimated minimum number of teachers not fully certified for their teaching assignments	50 & DC	108,757 ⁵
Reported vacancies	8	6,424

Endnotes

1. **The following states had insufficient data available:** Alaska, Colorado, Connecticut, Delaware, District of Columbia, Georgia, Indiana, Louisiana, Maine, New Hampshire, and Vermont.
2. All teacher counts are in full-time equivalents.
3. Common Core of Data. (2015). National Center for Education Statistics. Washington, DC: U.S. Department of Education. The 2014–15 school year is the most recent CCD available.
4. This number does not include reported vacancies. Note: As we update existing state data and collect more data, this figure will shift.
5. The above review of state teacher workforce reports reveals that in the 36 states that reported such data in 2016 or 2017, at least 87,091 positions were not filled by a fully certified teacher. Assuming the same rates of shortages in the remaining 14 states and the District of Columbia (3.5% of teaching positions), the national total of uncertified teachers in 2015–16 or 2016–17 would be approximately 108,757. Note: As we update existing state data and collect more data, this estimate will shift.