# State Teacher Shortages: Teaching Positions Left Vacant or Filled by Teachers Without Full Certification 

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## Summary

To understand how states are experiencing teacher shortages around the country, the Learning Policy Institute reviewed teacher workforce reports and state agency documents covering the 2020-21 or 2021-22 school years. These state-specific data sources are used to estimate the number of teachers not fully certified for their teaching assignments as well as count the number of unfilled teaching positions reported by each state. State laws typically specify that teachers who are not fully certified can be hired or assigned only if a fully certified teacher is not available. Therefore, both data points provide a strong indicator of the severity of shortages, but not all states report these data.

Based on data from the states with published information, 47 states plus the District of Columbia had an estimated 286,290 teachers who were not fully certified for their teaching assignments. The 21 states with published data on vacancies had 27,844 unfilled teacher positions. (See Table 1.) These estimates indicate that, at a minimum, 314,134 positions were either unfilled or filled by teachers not fully certified for their assignments, representing about 1 in 10 of all teaching positions nationally.

## Data Description

Table 2 captures the estimated minimum number of teachers not fully certified for their teaching assignments and the number of unfilled positions in each of the states with published data for the 2020-21 or 2021-22 school years (the most recent year of data available). Importantly, states vary in how they certify their teachers and report on their certification status. Teachers were included in the estimate of "not fully certified for their teaching assignments" if they were:

- teaching without any credential or license as defined by the state,
- teaching on an emergency or temporary credential (including long-term substitutes),
- completing preparation while teaching (including intern or lateral entry credentials), or
- teaching a subject or grade level not covered by their current credential (out of field).

Not all states used or reported these different categories of teaching certifications, so these data are defined as the "estimated minimum number of teachers not fully certified for their teaching assignments." For example, some states reported tallies from surveys that do not include all districts in the state. Additionally, some states reported data only in percentages. In these cases, total numbers were estimated based on the information provided by the state in their data dashboards or in the Common Core of Data. Finally, some states reported full-time equivalents (FTEs) while others reported the total number of teachers in given categories. Given all the differences in reporting across states for teacher certification, all values should be interpreted as estimates. The number of unfilled positions reported represents the number of unfilled teaching positions for a given school year unless otherwise noted. The total number of teachers-as reported in the Common Core of Data 2021-22—is included for each state to make it easier to interpret these values. ${ }^{1}$

These data were initially collected between January and March 2023 and then revised in May and June 2023. Many estimates were reported in state report cards as well as in reports on the educator workforce published by state agencies and research organizations. Three resources were also consulted in the search for state-level data: the National Education Agency's K-12 Workforce Data Resources (2022); the Education Commission of the States' 50 State Comparison and State Profiles (2022); and Nguyen, Lam, and Bruno's working paper Is There a National Teacher Shortage? (2022). ${ }^{2}$ Data were excluded from these estimates if the source did not include sufficient detail to appropriately interpret the values or if they were only reported by media sources but not found in state report cards or published research reports.

The national estimates in Table 1 represent an undercount of teachers not fully certified for their assignments and unfilled positions, both because some states did not report these data at all and because data from some states represented only a subset of schools or teaching positions. These estimates captured only one school year for each state with published data, either the 2020-21 or 2021-22 school year.

## Table 1

Teachers Without Full Certification and Unfilled Positions for All
Reporting States Reporting States

| Metric | Number of states reporting data | Total |
| :--- | :---: | :---: |
| Estimated minimum number of teachers not <br> fully certified for their teaching assignments | $47+$ DC | 286,290 |
| Minimum number of unfilled positions | 21 | 27,844 |
| Total number of teachers | $50+$ DC | $3,210,436$ |

Source: Learning Policy Institute (LPI) analysis of state-reported data sources (see Table 2) and Common Core of Data. National Center for Education Statistics. (2022). Common Core of Data, nonfiscal data for SY 2021-22. All estimates were calculated by LPI using the state-level data files.

Table 2
Teachers Without Full Certification and Unfilled Positions by State

| State |  | Estimated <br> minimum number <br> of teachers not <br> fully certified for <br> their teaching <br> assignments | Year |  | Unfilled <br> positions | Total <br> number of <br> teachers in <br> the state <br> $(2021-22)^{a}$ |
| :---: | :---: | :---: | :---: | :---: | :--- | :--- |


| State | Year | Estimated minimum number of teachers not fully certified for their teaching assignments | Unfilled positions | Total number of teachers in the state (2021-22) ${ }^{\text {a }}$ | Data description | Source |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arkansas | 2021-22 | 2,407 | Not reported | 38,846 | Arkansas does not publish statewide data on unfilled teacher positions. The state reported that 513 teachers were using an emergency teaching permit, 821 teachers were using a provisional license, and 1,073 teachers were teaching a course for which they were not licensed (out of field) for the 2021-22 school year. | State of <br> Arkansas <br> School Report <br> Card 2021-22 |
| California | 2020-21 | 27,475 | Not reported | 267,759 | California does not publish statewide data on unfilled teacher positions. The state reported that $1.5 \%$ of teachers were still completing preparation while serving as the teacher of record (intern); $4.4 \%$ were using a limited assignment permit or waiver (out of field); and $4.1 \%$ were using provisional, short-term, or substitute credentials ("ineffective"). Given that the state reported a total of 274,759.1 full-time-equivalent (FTE) teachers, an estimated 27,475 teachers were not fully certified for their teaching assignments for the 2020-21 school year. | California <br> 2020-21 <br> Teaching <br> Assignment <br> Monitoring <br> Outcomes <br> by Full-Time <br> Equivalent |


| State | Year | Estimated minimum number of teachers not fully certified for their teaching assignments | Unfilled positions | Total number of teachers in the state (2021-22) ${ }^{\text {a }}$ | Data description | Source |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Colorado | 2021-22 | 1,103 | 440 | 53,903 | The Colorado Educator Shortage survey reported that there were 5,729 open teaching positions at the start of the 2021-22 school year. Of those positions, 440 remained vacant for the entire school year. The minimum number of teachers not fully certified for their teaching assignments represents the number of educators hired to fill vacancies: 425 positions were filled with long-term substitutes, 545 positions were filled with alternative licensure candidates, and 133 positions were filled with emergency licensure candidates. This value likely underreports the number of teachers not fully certified for their teaching assignments because it does not account for all teachers in Colorado and only reflects the limited certification status of educators hired to fill vacancies in 1 year. ${ }^{\text {b }}$ | Colorado's <br> Educator <br> Shortage: <br> Survey <br> Results for the <br> 2021-2022 <br> School Year |
| Connecticut | 2021-22 | 1,007 | Not reported | 41,686 | Connecticut does not publish statewide data on unfilled teacher positions. The state reported that 1,007 teachers were working with emergency or provisional credentials and/ or not teaching in the subject or field for which they are certified or licensed for the 2021-22 school year. ${ }^{\text {c }}$ | Connecticut <br> Report Cards: <br> State of <br> Connecticut |


| State | Year | Estimated minimum number of teachers not fully certified for their teaching assignments | Unfilled positions | Total number of teachers in the state (2021-22) ${ }^{\text {a }}$ | Data description | Source |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Delaware | 2021-22 | 2,242 | Not reported | 9,965 | Delaware does not publish statewide data on unfilled teacher positions. The state reported that 2,242 teachers were out of field for the 2021-22 school year. Delaware considers a teacher to be out of field if they are using an emergency certificate, teaching a subject outside of their certified content area, using a certificate of eligibility, and/or are uncertified. | Delaware Report Card |
| District of Columbia | 2021-22 | 430 | Not reported | 7,828 | The District of Columbia (DC) does not publish data on unfilled teacher positions across DC. The Office of the State Superintendent of Education reported that $90.5 \%$ of teachers in DC Public Schools held a DC teaching certification for the 2021-2022 school year. Given that DC Public Schools reported a total of 4,528 teachers in 2021-22, an estimated 430 teachers were working without certification. ${ }^{\text {d }}$ This estimate likely underreports the number of teachers not fully certified for their teaching assignments because it excludes teachers in public charter schools and does not include teachers teaching a course outside their area of certification. | DC School Report Card |


| State | Year | Estimated minimum number of teachers not fully certified for their teaching assignments | Unfilled positions | Total number of teachers in the state (2021-22) ${ }^{\text {a }}$ | Data description | Source |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Florida | 2021-22 | 22,538 | 3,911 | 159,866 | The Florida Department of Education reported 4,489 unfilled positions for the 2021-22 school year. Of those unfilled positions, 3,911 were teacher positions. ${ }^{e}$ The state report card indicated that 22,538 teachers were using temporary teaching certificates for the 2021-22 school year. The number of teachers not fully certified for their teaching assignments is likely underreported because it does not include the number of teachers who were teaching outside their certified subject area. Florida reported that $8.4 \%$ of classes were taught by teachers who were not appropriately qualified based on state requirements, but the number of out-of-field teachers cannot be estimated based on the publicly reported data. | Florida <br> Identification of Critical Teacher Shortage Areas 2021-22 <br> Florida Report Card |
| Georgia | 2021-22 | 13,299 | Not reported | 119,831 | Georgia does not publish statewide data on unfilled teacher positions. The state reported that there were 6,790 teachers using emergency or provisional credentials and 6,509 teachers who were teaching classes outside their certified or licensed subject area for the 2021-22 school year. | Georgia Report <br> Card: K-12 <br> Public Schools <br> Report Card |


| State | Year | Estimated minimum number of teachers not fully certified for their teaching assignments | Unfilled positions | Total number of teachers in the state (2021-22) ${ }^{\text {a }}$ | Data description | Source |
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| Hawai'i | 2021-22 | 2,405 | 108 | 12,026 | In the Presentation on Teacher Positions Filled, the Hawai'i State Department of Education reported that there were 108 unfilled teaching positions as of October 1 for the 2021-22 school year. This number is likely underreported since it only includes vacancies in hard-to-staff regions and is not representative of the whole state. The state reported in the State of Hawai'i report that $20 \%$ of teachers were not licensed or state-certified for the subjects or grade levels that they taught (out of field) during the 2021-22 school year. Given the Common Core of Data-reported total number of teachers for the 2021-22 school year ( 12,026 ), an estimated 2,405 teachers were not yet fully certified for their assignments. | Hawai'i <br> Presentation <br> on Teacher <br> Positions Filled, <br> January 2022 <br> State of <br> Hawai': <br> Educator <br> Qualifications |
| Idaho | 2021-22 | 866 | Not reported | 17,935 | Idaho does not publish statewide data on unfilled teacher positions. The state's Professional Standards Commission reported that 923 educators were working under alternative authorizations during the 2021-22 school year, including educators who were working while completing preparation and credentialed educators who were working outside of their endorsement area. This number includes 57 pupil service staff, leaving 866 other educators with alternative authorizations. The report indicates that the vast majority of these alternative authorizations are for teachers, but this number may include a small number of school leaders or school counselors. | Idaho <br> Professional <br> Standards <br> Commission <br> Annual Report <br> 2021-22 |


| State | Year | Estimated minimum number of teachers not fully certified for their teaching assignments | Unfilled positions | Total number of teachers in the state (2021-22) ${ }^{\text {a }}$ | Data description | Source |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Illinois | 2021-22 | Not reported | 1,704 | 139,378 | The Illinois State Board of Education reports data on teacher vacancies in the Unfilled Positions report. It reported 1,704 unfilled teacher positions across all districts as of October 1 for the 2021-22 school year. The estimated number of teachers not fully certified for their assignments cannot be determined based on publicly available data. | Illinois <br> Educator <br> Licensure: <br> Unfilled <br> Positions 2021 |
| Indiana | 2021-22 | 6,206 | $840^{\text {f }}$ | 66,414 | Indiana collects data on teacher vacancies through the Teacher Vacancy Survey and reports these data in the Teacher Statistics Report. Based on LPI calculations of state-reported data, there were at least 840 teacher vacancies for the 2021-22 school year. ${ }^{5}$ A teaching position is considered vacant if it was unfilled for at least 90 days. This number is likely underreported since 119 local education agencies did not respond to the survey. The state issued 6,206 emergency permits for the 2021-22 school year. ${ }^{\text {h }}$ This number may be overreported since it includes emergency permits given to school counselors and administrators. | Indiana 2021-2022 <br> Teacher <br> Statistics <br> Report |
| Iowa | 2021-22 | 1,612 | Not reported | 36,059 | Iowa does not publish statewide data on unfilled teacher positions. The state reported that 1,612 teachers were using a provisional license for the 2021-22 school year. Teachers using a provisional license do not meet the licensure requirements in a particular content area and are considered to be teaching out of field. | State of lowa: <br> State Summary 2022 |


| State | Year | Estimated minimum number of teachers not fully certified for their teaching assignments | Unfilled positions | Total number of teachers in the state (2021-22) ${ }^{\text {a }}$ | Data description | Source |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Kansas | 2021-22 | 1,918 | Not reported | 38,353 | Kansas does not report statewide data on unfilled teacher positions. The state reported that $2 \%$ of teachers had a valid teaching license but were teaching outside of their endorsement area (out of field), $2 \%$ held a temporary type of license (not standard but qualified), and $1 \%$ did not hold a teaching license ("ineffective") for the 2021-22 school year. Given the Common Core of Data-reported total number of teachers for the 2021-22 school year ( 38,353 ), an estimated 1,918 teachers were not fully certified for their teaching assignments. | Kansas <br> Report Card <br> 2021-2022 |
| Kentucky | 2021-22 | 3,391 | Not reported | 43,380 | Kentucky does not publish statewide data on unfilled teacher positions. The state reported there were 2,885 teachers with emergency or provisional credentials and 506 teachers who did not meet all Kentucky certification requirements for the subject or grade level that they were teaching (out of field) for the 2021-22 school year. | Kentucky <br> School Report <br> Card |
| Louisiana | 2020-21 | 17,151 | Not reported | 38,773 | Louisiana does not publish statewide data on unfilled teacher positions. The state reported that 42\% of teachers were teaching outside their certified subject area (out of field) and 2.7\% of teachers were using provisional credentials for the 2020-21 school year. Given the Common Core of Data-reported total number of teachers for the 2020-21 school year (38,369), an estimated 17,151 teachers were not fully certified for their teaching assignments.' | Louisiana State Report Card 2020-2021 |


| State | Year | Estimated minimum number of teachers not fully certified for their teaching assignments | Unfilled positions | Total number of teachers in the state (2021-22) ${ }^{\text {a }}$ | Data description | Source |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Maine | 2021-22 | 276 | Not reported | 15,418 | Maine does not publish statewide data on unfilled teacher positions. The state reported 263 unqualified teachers and 13 teachers using emergency, targeted need, or transitional credentials for the 2021-22 school year. The state defines an unqualified teacher as one who is teaching in a subject or field for which they are not licensed. | Maine School Data 2021-22 Statewide |
| Maryland | 2021-22 | 6,724 | 1,621 | 62,443 | Maryland's State Board of Education reports data on teacher vacancies in Maryland's Teacher Workforce report. They reported 1,621 unfilled teacher vacancies as of September 2021. ${ }^{\text {. }}$ The state report card indicated that $10.8 \%$ of teachers were teaching a subject outside their area of certification (out of field). Given that the state reported a total of 62,258 teachers, an estimated 6,724 teachers were not fully certified for their teaching assignments. Of these out-offield teachers, an estimated 3,549 teachers ( $5.7 \%$ of all teachers) were using emergency or provisional credentials for the 2021-22 school year. | Maryland's <br> Teacher <br> Workforce: <br> Supply, <br> Demand, and <br> Diversity <br> Maryland State <br> Report Card |


| State | Year | Estimated minimum number of teachers not fully certified for their teaching assignments | Unfilled positions | Total number of teachers in the state (2021-22) ${ }^{\text {a }}$ | Data description | Source |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Massachusetts | 2021-22 | 4,961 | Not reported | 76,329 | Massachusetts does not publish statewide data on unfilled teacher positions. The state reports the percentage of teachers not using a waiver or provisional license (93.5\%), indicating that $6.5 \%$ were using a waiver or provisional license for the 2021-22 school year. Given that the state reported a total of $76,328.8$ teachers, an estimated 4,961 were not fully certified for their teaching assignments. Massachusetts does not require teachers in charter schools to be licensed. | Massachusetts Teacher Data (2021-22) |
| Michigan | 2021-22 | 5,936 | 1,228 | 86,258 | The Education Policy Innovation Collaborative at Michigan State University reported that there were 1,228 teacher vacancies for the 2021-22 school year. The report notes that this figure is likely underreported. The state's Annual Education Report indicated that 5,936 teachers were teaching in a subject or field for which they were not certified or licensed (out of field). Of these out-offield teachers, 2,535 teachers were using emergency or provisional credentials. | Michigan <br> Teacher <br> Shortage Study: <br> Comprehensive <br> Report <br> Michigan <br> Annual <br> Education <br> Report |


| State | Year | Estimated minimum number of teachers not fully certified for their teaching assignments | Unfilled positions | Total number of teachers in the state (2021-22) ${ }^{\text {a }}$ | Data description | Source |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Minnesota | 2021-22 | 5,153 | Not reported | 55,662 | Minnesota does not publish statewide data on unfilled teacher positions. The state's Professional Educator Licensing and Standards Board reported that there were 657 teachers with a Tier 1 license and 2,334 teachers with a Tier 2 license who held a teaching assignment as of October 2021. Both Tier 1 and 2 licenses are temporary teaching credentials issued to teachers who are not fully certified. There were 2,162 teachers who were teaching outside their certified subject area (out of field) for the 2021-22 school year. |  <br> Demand of <br> Teachers in <br> Minnesota |
| Mississippi | 2021-22 | 3,583 | 3,036 | 31,686 | Mississippi reports data on teacher vacancies in the Educator Shortage Survey conducted by the state's Department of Education. They reported 3,036 certified teacher vacancies as of October 2021. In the Teachers and School Leaders report, Mississippi reported that there were 2,234 teachers using emergency or provisional teaching licenses for the 2021-22 school year. The state also reported that $30,509.6$ of a state-reported total of $31,858.3$ teachers have a valid certificate and are teaching a course for which they are properly endorsed, suggesting that an estimated 1,349 teachers are teaching courses outside their endorsement area. | Mississippi <br> Educator <br> Shortage <br> Survey Results <br> Mississippi <br> Teachers and <br> School Leaders |


| State | Year | Estimated minimum number of teachers not fully certified for their teaching assignments | Unfilled positions | Total number of teachers in the state (2021-22) ${ }^{\text {a }}$ | Data description | Source |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Missouri | 2021-22 | 3,866 | 202 | 69,569 | Missouri reports data on teacher vacancies in the Educator Vacancy Report by the Department of Elementary and Secondary Education (DESE). Based on LPI calculations of state-reported data, there were 202 teacher positions left vacant in the 2021-22 school year. ${ }^{\text {k }}$ Based on LPI calculations of data reported in the Teacher Shortage Report by DESE, there were 3,866 inappropriately certified teachers for the 2021-22 school year.' The state defines inappropriately certified as an educator who is teaching in a content area they do not have the appropriate certificate for. | Missouri <br> Educator <br> Vacancy Report <br> 2022 <br> Teacher <br> Shortage <br> Report for <br> Missouri |
| Montana | 2021-22 | 438 | $2,349^{\text {m }}$ | 11,042 | Montana reports data on teacher vacancies in the Critical Quality Educator Shortages Report by the Office of Public Instruction. <br> They reported 2,349 vacancies for the 2021-22 school year. A school in Montana is considered to have a vacancy if, in any of the prior 3 school years, a position was filled with a teacher using an emergency or provisional certificate or filled from a candidate pool of less than five applicants, or if a teaching position remained unfilled. This number overrepresents the number of unfilled vacancies in the state. The state report card indicated that 38 teachers were teaching courses outside their endorsed subject areas (out of field) and 400 teachers were using a provisional license while completing their preparation for the 2021-22 school year. | Montana Critical Quality Educator Shortages <br> Montana 2021-22 State Report Card |


| State | Year | Estimated minimum number of teachers not fully certified for their teaching assignments | Unfilled positions | Total number of teachers in the state (2021-22) $^{\text {a }}$ | Data description | Source |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nebraska | 2021-22 | 1,716 | 68 | 24,230 | Nebraska publishes data on teacher vacancies in its annual Teacher Vacancy Survey Report. They reported that 68 teaching positions remained vacant for the 2021-22 school year. This number is likely underreported because only 244 of the 261 public school districts and Educational Service Units responded to the survey by the Department of Education. The state's Education Profile indicated that there were 1,716 teachers not fully endorsed for their teaching assignment (out of field). Of those out-of-field teachers, 186 were using provisional, transitional, or alternative program credentials for the 2021-22 school year. ${ }^{\text {n }}$ | Nebraska <br> Teacher <br> Vacancy Survey <br> Report <br> Nebraska <br> Public Schools <br> State Snapshot 2021-22 |
| Nevada | 2021-22 | 3,706 | Not reported | $23,746^{\circ}$ | Nevada does not publish statewide data on unfilled teacher positions. The state reported that 729 teachers were teaching without an endorsement for their subject area and 2,977 long-term substitutes were approved to fully staff classrooms for the 2021-22 school year. ${ }^{p}$ This value is likely underreported because it only includes teachers approved as long-term substitutes across five subject areas (elementary, mathematics, science, social studies, and English). | Nevada <br> Accountability <br> Report Card: <br> Personnel |
| New <br> Hampshire | 2021-22 | Not reported | Not reported | 14,626 | New Hampshire does not publish statewide data on unfilled teacher positions. The estimated number of teachers not fully certified for their assignments cannot be determined based on publicly available data. |  |


| State | Year | Estimated minimum number of teachers not fully certified for their teaching assignments | Unfilled positions | Total number of teachers in the state (2021-22) $^{\text {a }}$ | Data description | Source |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| New Jersey | 2021-22 | 2,937 | Not reported | 117,127 | New Jersey does not publish statewide data on unfilled teacher positions. The state reported that 2,937 teachers were potentially teaching outside their area of certification (out of field) for the 2021-22 school year. According to the state's Performance Report, a teacher is labeled "out of field" if they are potentially teaching outside their area of certification. This could occur if the teacher cannot be found in the New Jersey Department of Education's certification system, if their job code does not match their certification, or if the teacher has an expired certificate. | New Jersey <br> School <br> Performance Report |
| New Mexico | 2021-22 | Not reported | 1,048 | 21,475 | New Mexico State University publishes data on teacher vacancies in its New Mexico Educator Vacancy Report. They report 1,048 teacher vacancies as of September 2021. The state report card indicates that $99 \%$ of teachers have professional credentials in the subject they are teaching, but this data point is not tied to any specific school year. As a result, the estimated number of teachers not fully certified for their assignments cannot be determined based on publicly available data. | 2021 New <br> Mexico <br> Educator <br> Vacancy Report <br> New Mexico: <br> Educator <br> Quality |


| State | Year | Estimated minimum number of teachers not fully certified for their teaching assignments | Unfilled positions | Total number of teachers in the state (2021-22) ${ }^{\text {a }}$ | Data description | Source |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| New York | 2021-22 | 15,289 | Not reported | 215,092 | New York does not publish statewide data on unfilled teacher positions. The state reported that 15,289 teachers were teaching out of their subject or field of certification for the 2021-22 school year. It is unclear whether the state includes teachers with emergency waivers or temporary licenses in its definition of "out of subject or field of certification." As a result, this value may be underreported. | New York State <br> Data 2021-22 |
| North Carolina | 2020-21 | 6,207 | 3,218 | 102,034 | North Carolina reports data on teacher vacancies in the State of the Teaching Profession Report. They reported 3,218 vacancies on the 40th instructional day of the 2020-21 school year. The state reported that there were 292 Teach for America corps members and 5,915 teachers who entered the profession through a lateral entry license for the 2020-21 school year. Teachers in either category are not yet fully licensed and are still completing teacher preparation while being the teacher of record. The estimated number of teachers not fully certified for their teaching assignment is likely underreported because it does not include the number of teachers who are teaching outside their endorsed subject area. | 2020-2021 <br> State of the <br> Teaching <br> Profession in <br> North Carolina |


| State | Year | Estimated minimum number of teachers not fully certified for their teaching assignments | Unfilled positions | Total number of teachers in the state (2021-22) ${ }^{\text {a }}$ | Data description | Source |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| North Dakota | 2021-22 | 73 | Not reported | 9,531 | North Dakota does not publish statewide data on unfilled teacher positions. The state reported that there were 68 teachers using emergency or provisional certificates and that $0.06 \%$ of teachers were teaching outside their endorsed subject area for the 2021-22 school year. Given that the state reported $9,004.1$ teachers, an estimated 5 teachers were teaching out of field. | North Dakota: Staff Details 2021-22 |
| Ohio | 2021-22 | 3,932 | Not reported | 99,442 | Ohio does not publish statewide data on unfilled teacher positions. The state reported that 3,932 teachers did not have the proper certification for the courses they taught for the 2021-22 school year. | Ohio's Teacher Workforce |
| Oklahoma | 2021-22 | 6,263 | 680 | 43,090 | Oklahoma's State School Boards Association collects data on teacher vacancies in their Teacher Staffing Survey and reported 680 teaching vacancies for the 2021-22 school year. The state reported in the Oklahoma Education Facts that there were 3,863 teachers using emergency certificates and 2,400 teachers ("adjunct instructors") who were either teaching outside their area of certification or teaching without a valid certificate of any kind for the 2021-22 school year. | Oklahoma <br> Teacher <br> Staffing Survey <br> Shows Record <br> Vacancies <br> Oklahoma <br> Education <br> Facts |


| State | Year | Estimated minimum number of teachers not fully certified for their teaching assignments | Unfilled positions | Total number of teachers in the state (2021-22) ${ }^{\text {a }}$ | Data description | Source |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Oregon | 2021-22 | 4,653 | Not reported | 31,629 | Oregon does not publish statewide data on unfilled teacher positions. The state reported that $14.7 \%$ of teachers in the 2021-22 school year were teaching a course for which they did not have a proper endorsement (out of field) or were using emergency or provisional credentials. Given the state-reported total number of teachers for the 2021-22 school year $(31,650)$, an estimated 4,653 teachers were not fully certified for their assignments. | Oregon <br> Statewide <br> Annual Report <br> Card 2021-22 |
| Pennsylvania | 2020-21 | 13,337 | Not reported | 126,345 | Pennsylvania does not publish statewide data on unfilled teacher positions. The state reported that 13,337 teachers were teaching a subject or grade for which they were not fully certified (out of field). Of those teachers, 2,086 were not fully certified and held an emergency certification. | Pennsylvania ESSA Report Card 2022 |
| Rhode Island | 2021-22 | 692 | Not reported | 10,774 | Rhode Island does not publish statewide data on unfilled teacher positions. The state report card indicated that 692 teachers did not hold the appropriate certificate for their teaching assignments (out of field) for the 2021-22 school year. Of those 692 teachers, 628 were using emergency or preliminary certificates. The estimated number of teachers not fully certified for their teaching assignments is likely underreported because it only includes teachers in high-poverty and low-poverty schools and does not account for all schools within the state. | Rhode Island, 2021-22 <br> Report Card |


| State | Year | Estimated minimum number of teachers not fully certified for their teaching assignments | Unfilled positions | Total number of teachers in the state (2021-22) ${ }^{\text {a }}$ | Data description | Source |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| South Carolina | 2021-22 | 7,611 | 938 | 55,489 | The Center for Educator Recruitment, Retention, and Advancement at Winthrop University reported 1,063 vacant teaching and service positions in SeptemberOctober of the 2021-22 school year. 938 of those positions were teaching positions. The state report card indicated that 7,611 teachers were teaching a course or courses outside their field of certification (out of field) for the 2021-22 school year. | South Carolina <br> Annual <br> Educator <br> Supply and <br> Demand Report <br> South Carolina <br> School Report <br> Card: State of <br> SC 2021-22 |
| South Dakota | 2021-22 | 298 | 72 | 10,216 | South Dakota publishes data on teacher vacancies on the Department of Education's Data Dashboard. They reported 72 vacant instructional staff positions at the start of the 2021-22 school year. The state report card indicated that 298 teachers were teaching in content areas without certification (out of field) for the 2021-22 school year. Of those out-of-field teachers, 171 teachers were using provisional or temporary certificates and 41 teachers had no certification. | South Dakota Instructional Staff Turnover and Vacancy South Dakota Report Card |


| State | Year | Estimated minimum number of teachers not fully certified for their teaching assignments | Unfilled positions | Total number of teachers in the state (2021-22) $^{\text {a }}$ | Data description | Source |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Tennessee | 2021-22 | 1,477 | 1,024 ${ }^{4}$ | 64,747 | Tennessee collects data on teacher vacancies through a survey conducted by the state's Department of Education. Districts reported a total of 1,024 vacancies for the 2021-22 school year. A teaching position was considered vacant if it was unfilled by a licensed teacher for at least 20 days. The state reported that 275 teachers were teaching a course for which they did not have a valid endorsement (out of field), and 1,202 teachers were using emergency or provisional credentials for the 2021-22 school year.' | Tennessee <br> 2020-21 <br> Teacher <br> Vacancy Data <br> Tennessee <br> Educator <br> Experience and Licensure Data 2021-22 |
| Texas | 2021-22 | 49,346 | Not reported | 371,002 | Texas does not publish statewide data on unfilled teacher positions. The state reported in the Out-of-Field Teaching report that 29,426 teachers were teaching outside their certified subject area for the 2021-22 school year and an additional 10,691 special education teachers did not have special education and content certification for their assignments. ${ }^{\text {s }}$ In another report, the Texas Education Agency reported that there were 8,435 teachers hired with no certification or permit, and 794 teachers hired with emergency permits for the 2021-22 school year. ${ }^{\text {t }}$ These numbers only represent new hires in 2021-22 who are uncertified teachers or those working on an emergency permit. As a result, the estimated number of teachers not fully certified for their teaching assignments may be underreported. | Texas <br> Employed <br> Teacher <br> Attrition and <br> New Hires <br> 2007-08 <br> through <br> 2021-22 <br> Texas Out-of- <br> Field Teaching <br> for SY 2021-22 <br> by Grade Level <br> and Subject <br> Area |


| State | Year | Estimated minimum number of teachers not fully certified for their teaching assignments | Unfilled positions | Total number of teachers in the state (2021-22) ${ }^{\text {a }}$ | Data description | Source |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Utah | 2021-22 | 2,469 | 37 | 30,860 | Utah publishes data on teacher vacancies in their Teacher Turnover, Shortage, and Vacancy Maps. Based on LPI calculations of statereported data, there were 37 unfilled teaching positions on the first day of school for the 2021-22 year. This is likely underreported because data were not reported for all districts. The state reported that $8 \%$ of teachers were teaching a grade or subject for which they were not licensed. Given the Common Core of Data-reported total number of teachers for the 2021-22 school year ( 30,860 ), an estimated 2,469 were not fully certified for their teaching assignments. The state also reported that $4 \%$ of teachers were using temporary credentials; however, it is not clear if Utah includes teachers with temporary credentials in their definition of out of field, so this figure is not included in the calculation. The estimated number of teachers not fully certified for their teaching assignments may be underreported. | Utah 2021 <br> Teacher <br> Turnover, <br> Shortage, and <br> Vacancy Map <br> Utah State <br> Report <br> 2021-22 |
| Vermont | 2020-21 | 239 | Not reported | 7,965 | Vermont does not publish statewide data on unfilled teacher positions. The state reported that $97 \%$ of teachers were properly licensed in the 2020-21 school year. Given the Common Core of Data-reported total number of teachers for the 2020-21 school year ( 7,989 ), an estimated 239 teachers were not fully certified for their teaching assignments." | Vermont High Quality Staffing 2020-21 |


| State | Year | Estimated minimum number of teachers not fully certified for their teaching assignments | Unfilled positions | Total number of teachers in the state (2021-22) ${ }^{\text {a }}$ | Data description | Source |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Virginia | 2021-22 | 11,212 | 2,815 | 86,917 | Virginia reports data on teacher vacancies in the Staffing and Vacancy Report. They reported 2,815 vacant teaching positions across all subject areas as of October 1 for the 2021-22 school year. The Virginia State Quality Profile reported that $5.2 \%$ of all teachers were not fully endorsed for the content they are teaching (out of field) and $7.7 \%$ of all teachers were teaching on a provisional license for the 2021-22 school year. Given the Common Core of Data-reported total number of teachers for the 2021-22 school year $(86,917)$, an estimated 11,212 teachers were not fully certified for their teaching assignments. | Virginia <br> Staffing and Vacancy Report 2021-22 <br> Virginia State Quality Profile: Teacher Quality |
| Washington | 2021-22 | 4,880 | 776 | 60,147 | The Center for Education Data and Research reported 776 open teaching job postings as of October 2021. ${ }^{.}$The state report card indicated that 1,419 teachers were teaching under a "limited certified status" and 3,461 teachers were teaching at least one course outside their endorsement area for the 2021-22 school year. | Washington <br> School District <br> Staffing <br> Challenges <br> in a Rapidly <br> Recovering <br> Economy <br> Washington <br> Report Card: <br> State Total |
| West Virginia | 2021-22 | 1,210 | Not reported | 18,724 | West Virginia does not publish statewide data on unfilled teacher positions. The state reported that 1,210 teachers were using provisional credentials for the 2021-22 school year. The estimated number of teachers not fully certified for their teaching assignment is likely underreported because it does not include the number of teachers who are teaching outside their certified content area. | West Virginia State Overview: Personnel Data for State School Year 2021-22 |


| State | Year | Estimated minimum number of teachers not fully certified for their teaching assignments | Unfilled positions | Total number of teachers in the state (2021-22) ${ }^{\text {a }}$ | Data description | Source |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Wisconsin | 2021-22 | 3,732 | Not reported | 60,337 | Wisconsin does not publish statewide data on unfilled teacher positions. The state reports on teacher qualifications in the Inequitable Distribution of Teacher Report and reported 3,732 teachers were either teaching outside their license area (out of field) or teaching on an emergency permit while enrolled in preparation ("ineffective") for the 2021-22 school year." | Wisconsin <br> Public <br> Inequitable <br> Distribution of <br> Teacher Report 2021-22 |
| Wyoming | 2021-22 | 194 | Not reported | 7,308 | Wyoming does not publish statewide data on unfilled teacher positions. The state reported that there were 190 teachers using emergency or provisional credentials and 4 teachers working outside their licensed subject area for the 2021-22 school year. | Wyoming 2021-22 <br> Report Card |
| Totals: |  | 286,290 | 27,844 | 3,210,436 |  |  |

Notes:
${ }^{\text {a }}$ National Center for Education Statistics. (2022). Common Core of Data, nonfiscal data for SY 2021-22. All estimates were calculated by LPI using the state-level data files. For all files, we included observations from schools serving prekindergarten to 12 th grade but did not include adult education. Nevada did not report staffing data for the 2021-22 year, so we used the 2020-21 data to calculate Nevada's total number of teachers. The Common Core of Data's staffing information is expressed in full-time equivalents (FTEs). Some states also report their data in FTEs, while others report counts. This should be kept in mind when interpreting the estimated values.
${ }^{\text {b }}$ The figures capturing "teachers not fully certified for their teaching assignments" may include educators in non-teaching positions. The state's data tables include a small number of school leaders and educators in support roles, such as counselors and social workers. To find the number of educators hired to fill positions through a shortage mechanism, download the linked Excel file on page 1 of the Educator Shortage Report. The figures listed in the data description are the totals represented in the tables on the "Filled by Long-Term Substitutes," "Filled by Alternative Candidate," and "Filled by Emergency Candidates" tabs of the Excel file.
${ }^{c}$ Information on the number of out-of-field teachers is detailed in the Excel file available for download on the Connecticut State Report Card. The number of out-of-field FTE teachers is 1,006.85 and can be found on the "All v Charter Out of Field Detail" sheet of the file. An out-of-field educator is defined as "any educator whose compliance status in 2021-22 confirmed that they were working with emergency or provisional credentials and/or not teaching in the subject or field for which they were certified or licensed."
${ }^{\text {d }}$ The Common Core of Data count for teachers in the District of Columbia includes all public schools in the DC Public School district and all public charters. The percentage of certified teachers reported by DC's Office of State Superintendent of Education only includes teachers from the DC Public Schools. To estimate the number of teachers not fully certified for their assignments, we used the total number of teachers in DC Public Schools as reported by the following source: District of Columbia Public Schools. (2023). DCPS fast facts 2022.
${ }^{\text {e }}$ The number of unfilled teacher positions can be found in Exhibit 4 of the Critical Teacher Shortage Areas 22-23 report published by the Florida Department of Education. Exhibit 4 shows the "Current Number of Vacancies for 2021-22" by certification area. The state reported a total of 4,489 vacant positions for the 2021-22 school year. This figure includes 272 vacant speech language pathologist positions, 177 guidance positions, 56 school psychologist positions, and 40 school social worker positions. Accounting for those non-teaching positions, Florida reported a total of 3,911 vacant teaching positions across all certification areas.
${ }^{\dagger}$ A teaching position is considered vacant if it was unfilled for at least 90 days.
${ }^{5}$ The 2021-2022 Teacher Statistics Report is an Excel file available on the lowa Department of Education website. Data for the number of unfilled teacher vacancies represent the sum of Column C on the "Vacancy Data" sheet.
${ }^{n}$ The total number of educators using emergency permits is detailed at the bottom of the "Emergency Permits" sheet in the 2021-2022 Teacher Statistics Report Excel file.
${ }^{i}$ To calculate the estimated number of teachers not fully certified, we used the total number of teachers as reported in the Common Core of Data for the 2020-21 school year. https://nces.ed.gov/ccd/tables/202021_summary_2.asp\#f2
${ }^{j}$ The number of unfilled teacher vacancies is detailed in the Teacher Workforce Report (p.12) and represents the sum of the number of local education agency self-reported teacher vacancies.
${ }^{k}$ The total number of vacant teaching positions is detailed in the Educator Vacancy Report (p.2) and represents the sum of all vacant positions, excluding secondary counselors and elementary counselors.
' The total number of inappropriately certified teachers is detailed in Table VI of the Teacher Shortage Report and represents the sum of the FTE teachers inappropriately certified.
${ }^{m}$ A school in Montana is considered to have a vacancy if, in any of the prior 3 school years, a position was filled with a teacher using an emergency or provisional certificate or filled from a candidate pool of less than five applicants, or if a teaching position remained unfilled. This number overrepresents the number of unfilled vacancies in the state.
${ }^{n}$ Information on the number of teachers using provisional credentials and the number of out-of-field teachers is detailed in the Excel file available for download on the Nebraska Public Schools State Snapshot. The "Teacher Quality" Excel file can be accessed through the Data Downloads (2021-2022). The number of FTE teachers using provisional credentials is 185.67 and the number of FTE teachers who are teaching out of field is $1,715.5$. The state defines a teacher with a provisional credential as one "whose only active certificate is a provisional, transitional, or alternative program certificate." The state defines an out-of-field teacher as "one who is not fully endorsed and on-level for their assigned courses." Since teachers with provisional credentials are not fully certified, we assume that out-of-field teachers include those with provisional credentials, according to Nebraska's definition of these terms.
${ }^{\circ}$ Nevada did not report the total number of teachers in the 2021-22 data being used for this calculation. This figure is the total number of teachers as listed in the Common Core of Data for the 2020-21 school year. https://nces.ed.gov/ ccd/tables/202021_summary_2.asp\#f2
${ }^{\mathrm{p}}$ Information on the number of teachers not fully certified can be found on the Nevada Accountability Portal on the State Report Card. The data on the professional qualifications of educators are available on the "Personnel" tab of the portal and must be filtered to include the "\# Without an Endorsement for the Subject Area" and the number of long-term substitutes across the five subject areas.
${ }^{a}$ According to the linked source, a teaching position was considered vacant if it was unfilled by a licensed educator for a period of at least 20 days.
${ }^{r}$ The total number of teachers who were out of field or who held emergency or provisional credentials can be found in the "State Data 2021-22" tab of the "Educator Experience and Licensure Data 2021-22" data file.
${ }^{s}$ To calculate the number of out-of-field special education teachers, we subtract the number of special education and content-certified teachers from the total number of special education teachers (see page 3 of the Out-of-Field Teaching report). This number matches the out-of-field teachers reported on the Texas Education Agency's out-of-field teaching data dashboard.
${ }^{t}$ Teachers with provisional, probationary, intern, and 1-year certificates are included in the Texas Education Agency's Out-of-Field Teaching report. These teachers are only flagged as out of field if their teaching assignment is outside of their certification areas. As a result, the estimated number for Texas undercounts these teachers, as we consider them "not fully certified" if they are currently working on an intern or probationary certificate.
" To calculate the estimated number of teachers not fully certified, we used the total number of teachers as reported in the Common Core of Data for the 2020-21 school year. U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD). "Public Elementary/Secondary School Universe Survey," 2020-21, Provisional Version 1a, "Local Education Agency Universe Survey," 2020-21, Provisional Version 1a, and "State Nonfiscal Survey of Public Elementary/Secondary Education," 2020-21, Provisional Version 1a. https://nces.ed.gov/ccd/tables/202021_ summary_2.asp\#f2
v This report relied on job postings from school district websites as a proxy for shortages and included job postings from 216 of Washington's 295 districts. The 766 teaching positions included postings for substitute teachers.
${ }^{w}$ The number of teachers teaching outside their license area (out of field) or teaching on an emergency permit while enrolled in prep (ineffective) can be calculated by downloading the data file and then totaling the number of teachers reported in Column L (labeled "Out-of-field \& ineffective FTE").

## Endnotes

1. National Center for Education Statistics. (2022). Common Core of Data, nonfiscal data for SY 2021-22. All estimates were calculated by LPI using the state-level data files. For all files, we included observations from schools serving prekindergarten to 12th grade but did not include adult education. Nevada did not report staffing data for the 2021-22 year, so we used the 2020-21 data to calculate Nevada's total number of teachers. The Common Core of Data's staffing information is expressed in full-time equivalents (FTEs). Some states also report their data in FTEs, while other states report counts. This should be kept in mind when interpreting the estimated values.
2. National Education Association. (2022). K-12 educator workforce data resources; Education Commission of the States. (2022). 50-state comparison: Teacher recruitment and retention; Nguyen, T. D., Lam, C. B., \& Bruno, P. (2022). Is there a national teacher shortage? A systematic examination of reports of teacher shortages in the United States [EdWorkingPaper: 22-631]. Annenberg Institute at Brown University.

## Acknowledgments

The authors thank Jeremy Landa and Tuan Nguyen for their insight and guidance and our Learning Policy Institute (LPI) colleagues Desiree Carver-Thomas, Emma García, Melanie LeungGagné, Dara Liling, Tara Kini, Jennifer McCombs, Ryan Saunders, and Wesley Wei for their support and feedback for this project.
Research for this resource was supported by the Carnegie Corporation of New York. Core operating support for LPI is provided by the Heising-Simons Foundation, William and Flora Hewlett Foundation, Raikes Foundation, Sandler Foundation, and MacKenzie Scott. The ideas voiced here are those of the authors and not those of our funders.
Suggested citation: Franco, M., \& Patrick, S. K. (2023). State teacher shortages: Teaching positions left vacant or filled by teachers without full certification. Learning Policy Institute. https://learningpolicyinstitute.org/ product/state-teacher-shortages-vacancy
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