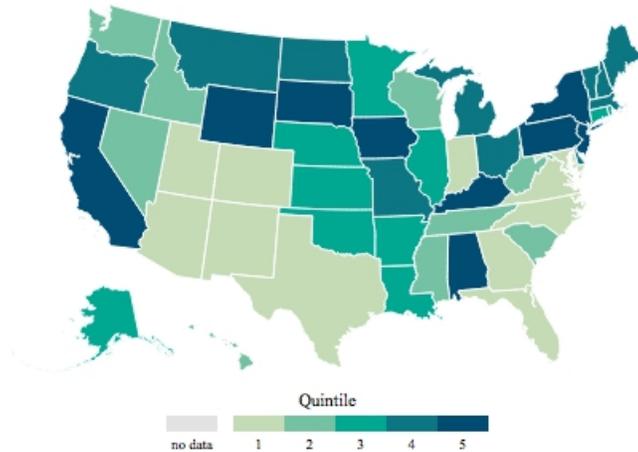


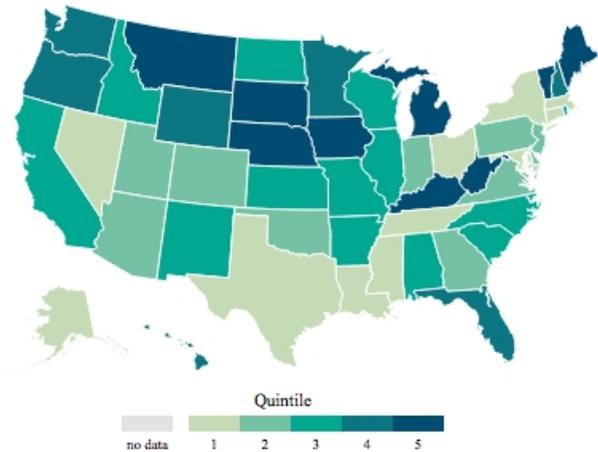
United States: Understanding Teacher Shortages

This map highlights a number of key factors that reflect and influence teacher supply and attrition and signal whether states are likely to have an adequate supply of qualified teachers to fill their classrooms. Based on these data - which treat compensation, teacher turnover, working conditions, and qualifications - each state is assigned a "teaching attractiveness rating," indicating how supportive it appears to be of teacher recruitment and retention and a "teacher equity rating", indicating the extent to which students, in particular students of color, are assigned uncertified or inexperienced teachers. Ratings are on a 1-5 scale, with 1 (the lightest color) being the least desirable and 5 (the darkest color) being the most desirable.

Teaching Attractiveness Rating:



Teacher Equity Rating:



Indicator	US Average
Compensation Rating	
Starting Salary	\$38,617
Wage Competitiveness	75
Working Conditions Rating	
Pupil-Teacher Ratio	16 : 1
Classroom Autonomy	71%
Collegiality Within School	39%
Testing-Related Job Insecurity	12%
Administrative Support	50%
Teacher Qualifications Rating	
% Inexperienced Teachers	12.7%
% Uncertified Teachers	2.6%
Teacher Turnover Rating	
Left Profession*	—
Left School or Profession*	—
Plans to Leave Teaching	7.3%

Indicator	US Average
Ratio of Uncertified Teachers in High- vs. Low-Minority Schools	3.70 : 1
% Uncertified Teachers in Low-Minority Schools	1.28%
% Uncertified Teachers in High-Minority Schools	4.75%
Ratio of Inexperienced Teachers in High- vs. Low-Minority Schools	1.70 : 1
% Inexperienced Teachers in Low-Minority Schools	9.93%
% Inexperienced Teachers in High-Minority Schools	17.31%
% Teachers of Color	20%

The data are drawn from national data sources, representing the most recent data available for analysis. Interpretations of the data should keep in mind that, depending on the specific statistic, these sources are from 2016 and 2017. Some states may have recently experienced changes in policies or conditions which would change the statistic reported if it were collected today. In addition, in some cases, sample sizes are relatively small. We do not report data for states where the samples are too small to meet NCES guidelines for reporting. Complete notes and source information are available at <http://learningpolicyinstitute.org/understanding-teacher-shortages-notes-sources>. Last updated October 3, 2018.

Definitions and Sources

Teaching Attractiveness Rating: The average quintile rank (1-5) of each indicator in the following categories: compensation (2016-17), teacher turnover (2016), working conditions (2016), and teacher qualifications (2016).

Compensation Rating: The average quintile rank (1-5) of starting salary and salary competitiveness (2016 data).

Starting Salary: The average starting salary in 2016-17. *Source: NEA (2017). 2016-2017 Average Starting Teacher Salaries by State. See <http://www.nea.org/home/2016-2017-average-starting-teacher-salary.html>*

Wage Competitiveness: Average estimated teacher wage as percentage of estimated non-teacher wage for college graduates in each state, at comparable age levels, level of education (BA or MA degree), and working hours per week and year (2016 data). *Source: Obtained by special request from Bruce Baker, who has updated the data from an earlier report: Baker, B.D., Farrie, D., & Sciarra, D.G. (2016). Mind the gap: 20 years of progress and retrenchment in school funding and achievement gaps. Educational Testing Service: Princeton, NJ.*

Working Conditions Rating: The average quintile rank (1-5) of each of the following indicators: administrative support, testing-related job insecurity, collegiality, teacher autonomy, and pupil-teacher ratios from 2016 survey data.

Pupil-Teacher Ratio: Pupil-Teacher Ratio in 2016. *Source: Glander, M. (2017). Selected Statistics From the Public Elementary and Secondary Education Universe: School Year 2015-16 (NCES 2018-052). U.S. Department of Education. Washington, DC: National Center for Education Statistics. Retrieved [07/10/18] from <http://ces.ed.gov/pubsearch>.*

Classroom Autonomy: Percentage of teachers who report they have control in their classroom in the following areas of planning and teaching: textbooks and class materials, content and skills to be taught, teaching techniques, evaluating students, discipline, and homework (2016). *Source: LPI analysis of the Public School Teacher File, 2016, from the National Teacher and Principal Survey, National Center for Education Statistics.*

Collegiality Within School: Percentage of teachers who strongly agree that there is a great deal of cooperative effort among the staff members (2016). *Source: LPI analysis of the Public School Teacher File, 2016, from the National Teacher and Principal Survey, National Center for Education Statistics.*

Testing-Related Job Insecurity: Percentage of teachers who strongly agree that they worry about the security of their job because of the performance of their students or school on state and/or local tests (2016). *Source: LPI analysis of the Public School Teacher File, 2016, from the National Teacher and Principal Survey, National Center for Education Statistics.*

Administrative Support: Percentage of teachers who strongly agree that their school administration's behavior toward the staff is supportive and encouraging (2016). *Source: LPI analysis of the Public School Teacher File, 2016, from the National Teacher and Principal Survey, National Center for Education Statistics.*

Teacher Qualifications Rating: The average quintile rank (1-5) of uncertified teachers and inexperienced teachers (2016).

% Inexperienced Teachers: Percentage of first- and second-year teachers in 2016. *Source: LPI analysis of the Civil Rights Data Collection, Public-Use Data File 2015-16, National Center for Education Statistics.*

% Uncertified Teachers: Percentage of teachers who have not met state certification requirements in 2016, including those teaching while still finishing their preparation, or teaching with an emergency-style credential. *Source: LPI analysis of the Civil Rights Data Collection, Public-Use Data File 2015-16, National Center for Education Statistics.*

Teacher Turnover Rating: The quintile rank (1-5) of the % of teachers who report they plan to leave teaching as soon as possible or as soon as a more desirable job opportunity arises (2016). Recent data on the % who left the school or profession are unavailable; therefore these indicators are omitted from this rating. For teacher turnover ratings that include the 2012-13 data for those variables, see the [2016 interactive map](#).

Left Profession: Recent data unavailable, as the National Teacher and Principal Survey did not administer a follow-up survey to measure the rates of teachers leaving the profession in 2016-17. For 2012-13 leaver rates, see the [2016 interactive map](#).

Left School or Profession: Recent data unavailable, as the National Teacher and Principal Survey did not administer a follow-up survey to measure the rates of teachers leaving the profession or moving schools in 2016-17. For 2012-13 mover and leaver rates, see the [2016 interactive map](#).

Plans to Leave Teaching: Percentage of teachers planning to leave teaching as soon as possible or as soon as a more desirable job opportunity arises (2016). *Source: LPI analysis of the Public School Teacher File, 2016, from the National Teacher and Principal Survey, National Center for Education Statistics.*

Ratio of Uncertified Teachers in High- vs. Low-Minority Schools: Percentage of uncertified teachers in high-minority schools / Percentage of uncertified teachers in low-minority schools (2016). Uncertified teachers have not met state certification requirements in the field they are teaching, and include those teaching while still finishing their preparation, or teaching with an emergency-style credential. *Source: LPI analysis of the Civil Rights Data Collection, Public-Use Data File 2015-16, National Center for Education Statistics.*

Teacher Equity Rating: The average quintile rank (1-5) of the ratio of uncertified teachers in high- vs. low-minority schools, the ratio of inexperienced teachers in high- vs. low-minority schools, uncertified teachers in high-minority schools, and inexperienced teachers in high-minority schools.

% Uncertified Teachers in Low-Minority Schools: Percentage of teachers in low-minority schools who are not certified (2016). Uncertified teachers have not met state certification requirements in the field they are teaching, and include those teaching while still finishing their preparation, or teaching with an emergency-style credential. *Source: LPI analysis of the Civil Rights Data Collection, Public-Use Data File 2015-16, National Center for Education Statistics.*

% Uncertified Teachers in High-Minority Schools: Percentage of teachers in high-minority schools who are not certified (2016). Uncertified teachers have not met state certification requirements in the field they are teaching, and include those teaching while still finishing their preparation, or teaching with an emergency-style credential. *Source: LPI analysis of the Civil Rights Data Collection, Public-Use Data File 2015-16, National Center for Education Statistics.*

Ratio of Inexperienced Teachers in High- vs. Low-Minority Schools: Percentage of inexperienced teachers in high-minority schools / Percentage of inexperienced teachers in low-minority schools (2016). An inexperienced teacher is defined as one in his/her first or second year of teaching. *Source: LPI analysis of the Civil Rights Data Collection, Public-Use Data File 2015-16, National Center for Education Statistics.*

% Inexperienced Teachers in Low-Minority Schools: Percentage of first- or second-year teachers in low-minority schools (2016). *Source: LPI analysis of the Civil Rights Data Collection, Public-Use Data File 2015-16, National Center for Education Statistics.*

% Inexperienced Teachers in High-Minority Schools: Percentage of first- or second-year teachers in high-minority schools (2016). *Source: LPI analysis of the Civil Rights Data Collection, Public-Use Data File 2015-16, National Center for Education Statistics.*

% Teachers of Color: Percentage teachers of color (2016). *Source: LPI analysis of the Public School Teacher File, 2016, from the National Teacher and Principal Survey, National Center for Education Statistics.*