

# **2024 Update: What's the Cost of Teacher Turnover?**

## **Technical Supplement**

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## Introducing the 2024 Calculator

The Learning Policy Institute launched an updated version of its teacher turnover calculator in 2024. The calculator provides an interactive way to estimate the financial cost of teacher turnover for practitioners and policymakers, and it offers per-teacher estimates of the cost of turnover for districts of different sizes. The per-teacher estimates are based on five studies that calculated the financial costs of the separation, recruiting, hiring, and training activities associated with teacher turnover. [Table 1](#) lists the nine districts included in these underlying studies, along with their size, per-pupil expenditures, geographic context, and per-teacher turnover costs as estimated in each study. While the underlying studies calculated costs in the year of data collection, [Table 1](#) values were adjusted for inflation to present costs in 2024 dollars. The per-teacher estimates offered in the calculator are:

- \$11,860 for small districts (under 10,000 students)
- \$16,450 for medium districts (10,000–50,000 students)
- \$24,930 for large districts (more than 50,000 students)

These estimates were created by averaging the reported turnover costs for every district in each size category. Given the differences in district contexts and reported turnover costs within each category, users of the calculator may refer to [Table 1](#) to determine if their district is similar to any of the studied districts and adjust estimates as needed. As described in the rest of the supplement, these estimates do not fully capture all the financial costs of turnover and do not account for other costs of turnover, including negative impacts on student learning and school climate.

**Table 1. Estimates of Per-Teacher Cost of Turnover**

School district	Number of students	Number of schools	Per-pupil expenditures	Geographic context	Turnover cost per teacher (in 2024 \$)
Jemez Valley Public Schools <sup>a</sup>	359	4	\$24,824	Rural	\$7,270
Granville County Public Schools <sup>a</sup>	6,748	16	\$11,086	Rural	\$16,445
Tulsa Public Schools <sup>b</sup>	33,871	69	\$13,909	City	\$12,206
St. Lucie County School District <sup>c</sup>	45,661	53	\$11,275	City	\$7,489
Boston Public Schools <sup>d</sup>	46,367	109	\$39,887	City	\$29,650
Milwaukee Public Schools <sup>a</sup>	67,500	156	\$17,506	City	\$25,521

School district	Number of students	Number of schools	Per-pupil expenditures	Geographic context	Turnover cost per teacher (in 2024 \$)
<b>Unidentified Midwestern District<sup>e</sup></b>	90,000	160	Not available	City	\$23,971
<b>Broward County School District<sup>c</sup></b>	254,732	325	\$12,217	Suburb	\$20,461
<b>Chicago Public Schools<sup>a</sup></b>	321,666	643	\$21,914	City	\$29,762

<sup>a</sup> Barnes, G., Crowe, E., & Schaefer, B. (2007). *The cost of teacher turnover in five school districts: A pilot study*. National Commission on Teaching and America's Future.

<sup>b</sup> Synar, E., & Maiden, J. (2012). A comprehensive model for estimating the financial impact of teacher turnover. *Journal of Education Finance*, 38(2), 130–144.

<sup>c</sup> Watlington, E., Shockley, R., Guglielmino, P., & Felsher, R. (2010). The high cost of leaving: An analysis of the cost of teacher turnover. *Journal of Education Finance*, 36(1), 22–37.

<sup>d</sup> Levy, A. J., Joy, L., Ellis, P., Jablonski, E., & Karelitz, T. M. (2012). Estimating teacher turnover costs: A case study. *Journal of Education Finance*, 38(2), 102–129.

<sup>e</sup> Milanowski, A., & Odden, A. (2007). *A new approach to the cost of teacher turnover*. School Finance Redesign Project, Center on Reinventing Public Education.

Notes: Data on geographic context, per-pupil expenditure, number of students, and number of schools are from [NCES Common Core of Data \(CCD\) district profile](#) information for each district. The geographic context, number of schools, and number of students are from the 2022–23 school year, while the expenditures per pupil are from the 2020–21 school year. The number of students and schools for the unidentified Midwestern district was reported by Milanowski and Odden (2007). Cost estimates from each study were adjusted for inflation using the [Consumer Price Index inflation calculator](#) to reflect the dollar amount in January 2024. Turnover costs include district- and school-level costs for most districts but only include district-level costs for Tulsa Public Schools, St. Lucie County School District, and Broward County School District.

# Updating the Turnover Calculator

This current version of the calculator, published in 2024, updates an earlier version that launched in 2017. The estimates in the 2017 calculator were based on findings from three studies and offered three per-teacher estimates to capture turnover costs in rural, suburban, and urban districts.<sup>1</sup> In 2024, we updated the calculator to provide new estimates of the cost of teacher turnover. For this update, we engaged in a four-step process:

1. Search for additional studies capturing the financial costs of teacher turnover.
2. Screen studies for inclusion in the calculator.
3. Update the calculator methodology with new data.
4. Reestimate the per-teacher cost of turnover, adjusting for inflation.

Each step in this process is briefly described below.

## Search for Additional Studies Capturing the Financial Cost of Teacher Turnover

To update the calculator with the latest research on the costs of teacher turnover, our literature search process included the following five steps:

1. Original searches of academic articles, reports, and news/media using search terms such as “teacher turnover cost,” “financial impact of teacher turnover,” and other closely related terms.
2. Forward and backward citation searching, starting with the original three studies.
3. Browsing titles and abstracts of papers that were listed as “related articles” to the original studies.
4. Searching education finance journals such as the *Journal of Education Finance*, *Education Finance and Policy*, *Economics of Education Review*, the *Journal of Education Administration*, *Educational Evaluation and Policy Analysis*, and the *Journal of Public Budgeting, Accounting & Financial Management* using the same terms described above.
5. Reaching out to education finance researchers and district leaders for additional resources.

## Screen Studies for Inclusion in the Calculator

Once the search produced the list of publication candidates, we identified screening criteria for inclusion in the estimate:

- studies published after the year 2007 (the publication year for most of the original studies included in the calculator);
- studies based in the United States;
- studies that offered sufficient methodological detail to describe their estimate; and
- studies that included a per-teacher estimate of the cost of turnover.

The literature search yielded three additional studies that met all search criteria. However, we decided not to include a study that was conducted in Alaska, recognizing the state’s unique context and expenses related to out-of-state teacher recruitment and replacement.<sup>2</sup>

The 2024 update incorporated new teacher turnover calculations from two additional studies:

1. Levy, A. J., Joy, L., Ellis, P., Jablonski, E., & Karelitz, T. M. (2012). Estimating teacher turnover costs: A case study. *Journal of Education Finance*, 38(2), 102–129.
2. Synar, E., & Maiden, J. (2012). A comprehensive model for estimating the financial impact of teacher turnover. *Journal of Education Finance*, 38(2), 130–144.

## Update the Methodology of the Calculator With New Data

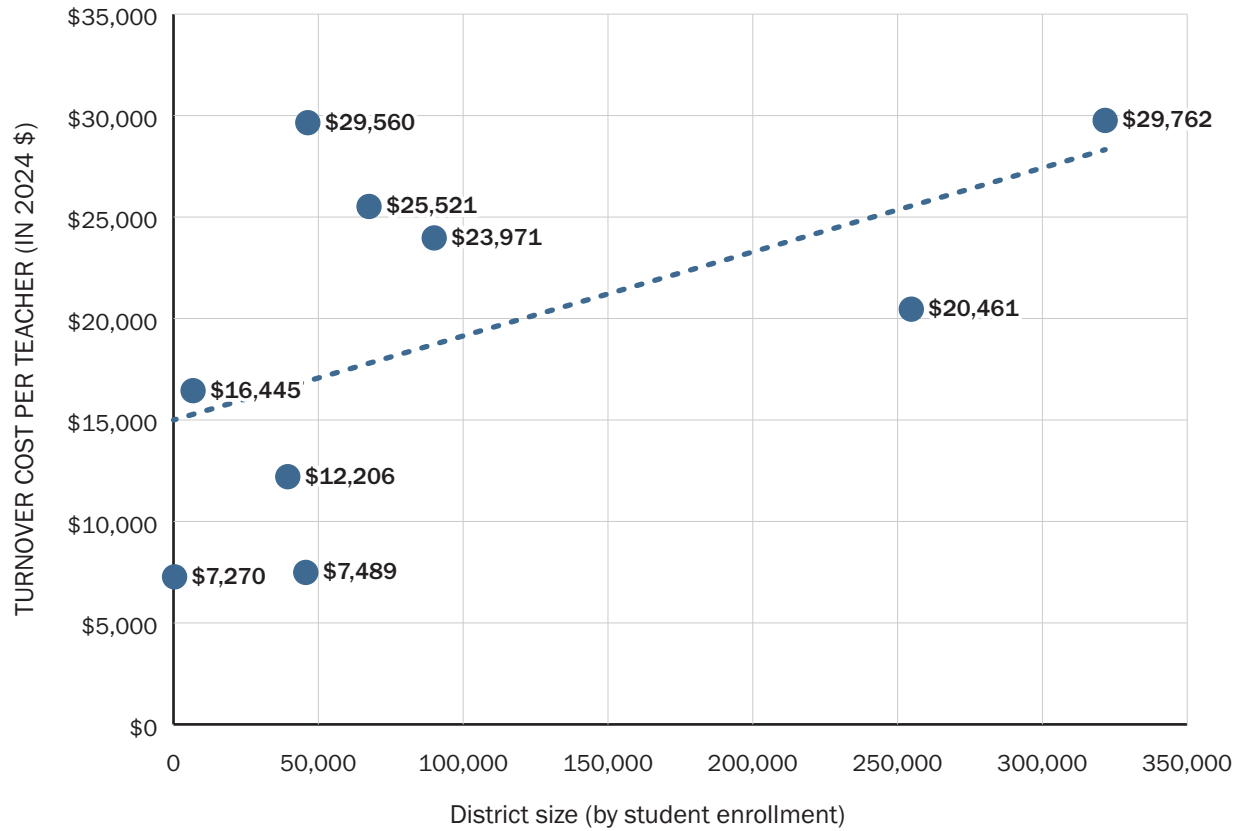
During the process of updating the calculator, we examined patterns in the five underlying studies and decided to change the types of estimates available in the calculator. The 2017 version of the calculator offered separate estimates for rural, suburban, and urban districts. In the updated version of the calculator, we opted to provide different estimates based on district size measured by the number of students enrolled in the district where the study was conducted. We made this choice for three reasons.

1. While we may expect that some costs—most notably, salaries—may be lower in rural areas, there is mixed evidence that other costs associated with turnover in rural districts vary substantially from urban districts.<sup>3</sup>
2. Empirical evidence among the included studies shows a moderate relationship between per-teacher turnover costs and district size, as shown in [Figure 1](#).
3. The underlying studies offer multiple insights that could explain why larger districts may have, on average, higher per-teacher costs. For the smallest districts, the various tasks related to recruiting, hiring, and supporting new teachers often are handled by a small number of people and not duplicated at both the school and district levels.<sup>4</sup> In contrast, in larger districts, there may be recruitment, hiring, and training costs that occur at multiple levels. For example, larger districts may have dedicated district staff who support teacher hiring in a centralized Human Resources department while there are also school staff serving on hiring committees that dedicate considerable time to the hiring process. In addition, larger districts may be more likely to invest in intensive teacher induction programs—often including both school-level and district-level staff—that increase the per-teacher costs. For example, the study of two Florida districts—St. Lucie County and Broward County—concluded the much higher per-teacher cost in Broward County (a district that is more than five times larger than St. Lucie County) was primarily due to the district’s investment in a districtwide teacher induction and support program.<sup>5</sup>

## Reestimate the Per-Teacher Cost of Turnover, Adjusting for Inflation

As shown in [Table 1](#), the updated calculator’s estimated cost of turnover is now based on per-teacher estimates from five studies and nine districts. We took the original estimate as reported in each study (see [Appendix A](#)) and then adjusted for inflation using the U.S. Bureau of Labor Statistics’ Consumer Price Index (CPI) Inflation Calculator.<sup>6</sup> All per-teacher estimates are adjusted for costs as of January 2024. The CPI calculator determines changes in the cost of all goods and services consumed by urban households by using the average CPI for a given calendar year. [Appendix A](#) offers a description of each district included in the study, along with the original per-teacher cost and the adjusted cost.

**Figure 1. Per-Teacher Turnover Costs and District Size**



Note: The correlation between district size, measured by the number of students served at the time the study was conducted, and per-teacher cost is moderately strong ( $r = 0.53$ ).

Source: Learning Policy Institute analysis of per-teacher costs. (2024).



## Approach of Underlying Studies

Five studies serve as the basis for the updated calculator:

1. Barnes et al. (2007) is a study of turnover costs in Chicago Public Schools, Granville County Public Schools, Jemez Valley Public Schools, and Milwaukee Public Schools.<sup>7</sup>
2. Levy et al. (2012) is a study of turnover costs in Boston Public Schools.<sup>8</sup>
3. Milanowski & Odden (2007) is a study of turnover costs in an unidentified Midwestern District.<sup>9</sup>
4. Synar & Maiden (2012) is a study of turnover costs in Tulsa Public Schools.<sup>10</sup>
5. Watlington et al. (2010) is a study of turnover costs in Broward County School District and St. Lucie County School District.<sup>11</sup>

The studies use similar approaches to estimating the per-teacher cost of teacher turnover. All studies rely on actual costs reported by school- and district-level budgets associated with teacher turnover or reported in interviews with school or district personnel. Specifically, these studies capture costs associated with three types of activities connected to a teacher leaving and a new teacher replacing them: (1) separation with outgoing teachers, (2) recruitment and hiring of incoming teachers, and (3) training of incoming teachers.

Table 2 includes a list of possible costs that could be part of each of these processes. Not every study was able to include every cost included in Table 2. All studies report total costs as well as per-teacher costs. These studies do not include more comprehensive costs of turnover, such as academic learning losses for students that can occur when their teachers or other teachers in their school leave. These nonfinancial costs are discussed in the next section of this technical supplement.

### Differences in Data Reported Across Studies

There is some notable variation across studies in terms of the exact cost information available. As shown in Table 3, all studies include **recruitment and hiring** costs and **training** costs as separate categories in their studies. Barnes et al. (2007) do not include **separation** costs as a separate category in their study, but they include certain aspects of separation costs in their “administrative processing” category. The other four studies include reporting specifically for separation costs. While three of the studies captured costs at both the district and school levels, Watlington et al. (2010) and Synar and Maiden (2012) only collected district-level budget information. This may partially explain why their estimates are lower than some of the per-teacher costs reported in other studies.

There were also cases in which participating districts were unable to report certain costs within each category. The Levy et al. (2012) study was unable to get data on the use and cost of long-term substitutes to replace teachers leaving midyear, so those costs are not included in their model. In reviewing the cost of teacher turnover in five districts, Barnes et al. (2007) found that some districts were unable to report certain school-level costs, and the authors accounted for these missing costs using estimates from a comparable school district. For example, Chicago Public Schools (CPS) was unable to report school-level costs associated with interviewing, hiring, new teacher orientation, mentoring, and induction. To estimate these costs, the authors applied the school-level costs per leaver of Milwaukee Public Schools to CPS. These variations across studies offer additional insights into the complexity of calculating teacher turnover costs.

**Table 2. Specific Costs Associated With Teacher Turnover**

<p><b>Separation costs</b></p>	<ul style="list-style-type: none"> <li>• Paying substitutes to cover for midyear departures</li> <li>• Removing teachers from payroll and health plans and processing eligible refunds of retirement contributions</li> <li>• Conducting and analyzing exit surveys</li> </ul>
<p><b>Recruitment and hiring costs</b></p>	<ul style="list-style-type: none"> <li>• Developing job advertisements and advertising open positions</li> <li>• Holding and/or attending job fairs</li> <li>• Working with teacher preparation programs to identify candidates and coordinating recruitment activities with state or local programs</li> <li>• Responding to inquiries from prospective candidates, corresponding with applicants, and drafting offer or rejection letters</li> <li>• Scheduling site visits and conducting interviews</li> <li>• Convening hiring committee members to review resumes, schedule current staff and interviewees, and conduct interviews</li> <li>• Offering new hires signing bonuses, relocation bonuses, or other subsidies</li> <li>• Conducting criminal background checks, health record checks, credentialing checks, and reference checks</li> <li>• Purchasing equipment for digital fingerprinting</li> <li>• Adding new teachers to payroll and benefit programs</li> <li>• Archiving teacher records</li> </ul>
<p><b>Training costs</b></p>	<ul style="list-style-type: none"> <li>• Coordinating and staffing mentoring programs and related forms of structured induction, including training costs and stipends for mentors and payments to substitutes who replace mentors with reduced teaching loads</li> <li>• Holding welcome or orientation events for new staff</li> <li>• Traveling to training sessions and professional meetings</li> <li>• Conducting onboarding workshops and professional development activities</li> <li>• Paying substitutes while teachers attend training activities</li> </ul>

Source: Learning Policy Institute review of teacher turnover cost studies. (2024).

In addition to the costs listed above, multiple studies included other considerations in their estimated costs that are not reflected in the calculator estimates. Two of the studies—Milanowski and Odden (2007) and Levy et al. (2012)—accounted for **salary differentials** between outgoing and incoming teachers. If, for example, a veteran teacher is being replaced by a first-year teacher, then the district could expect a substantial saving in terms of the annual salary paid for that teaching position. Both studies found that incoming teachers averaged lower salaries than the teachers they replaced (the magnitude of the difference varied across studies). Milanowski and Odden (2007) and Synar and Maiden (2012) also included estimated costs for **productivity loss**, or the loss of performance productivity theorized for new hires (i.e., the idea that a newly hired teacher may be less effective than the more experienced teacher they replaced). The estimated cost of productivity loss varied tremendously depending on the method used.<sup>12</sup> These calculations require multiple assumptions that may not be true in all districts, especially about the experience and effectiveness of outgoing compared to incoming teachers. The study that included both salary differentials and productivity losses found that, depending on how productivity losses are estimated, the savings from salary differential may be canceled out by losses in teacher productivity.

For the purposes of the calculator, we opted to use the authors’ estimated per-teacher turnover costs that excluded the salary differentials and performance productivity estimates. However, school and district leaders should certainly consider these factors given the patterns in their own districts, especially potential losses in teacher effectiveness that occur when experienced, effective teachers leave.

**Table 3. Cost Categories Included in Each Study**

Costs	Barnes et al. (2007) study	Levy et al. (2012) study	Milanowski & Odden (2007) study	Synar & Maiden (2012) study	Watlington et al. (2010) study
<b>Costs included in the calculator</b>					
Recruitment and hiring	✓	✓	✓	✓	✓
Training	✓	✓	✓	✓	✓
Separation		✓	✓	✓	✓
District-level costs	✓	✓	✓	✓	✓
School-level costs	✓	✓	✓		
<b>Costs not included in the calculator</b>					
Salary differentials		✓	✓		
Performance productivity			✓	✓	

Source: Learning Policy Institute review of teacher turnover cost studies. (2024).

## Differences in Costs Across Districts

As shown in [Table 1](#) and [Figure 1](#), the per-teacher turnover costs range substantially across districts and studies. Some of these differences occur due to differences in data collection approaches and availability of data across studies. In the two studies that included multiple districts—Barnes et al. (2007) and Watlington et al. (2010)—there were notable differences in the costs reported by districts and the relative costs associated with the categories of separation, recruiting and hiring, and training.

Four of the five studies reported a breakdown of the costs within different categories, and these data points offer insights into the biggest sources of turnover costs. Across the seven districts with this more detailed information, training costs accounted for the majority of costs, from an estimated 55% to 87% of the total costs. For example, the study of turnover costs in Boston Public Schools found that training costs made up approximately 87% of the total cost per leaver, while around 11% went to recruitment and hiring costs and only 1% to separation costs.<sup>13</sup> In comparison, Milanowski and Odden (2007) reported that about 55% of total costs in the unidentified Midwestern district were attributed to training costs, 24% to recruitment and hiring costs, and 21% to separation costs.<sup>14</sup> The specific sources of the total estimated cost appeared to vary across districts, along with differences in the specific methodology and data collected by each study. As noted above, the estimates in the calculator were created from averaging reported costs among districts within each size category and did not adjust for differences in data collection and methodology across studies.

## Strengths and Limitations

As a tool to understand the potential costs of teacher turnover, the calculator has notable strengths and limitations. In terms of its strengths, the estimates in the calculator are based on actual costs reported by schools and districts that cover separation, recruitment, hiring, and training. These studies generally adhere to a similar methodology for tracking and reporting costs (notable differences are discussed in the prior section), and the estimates in the calculator offer an initial starting point for districts to assess and compare the financial implications of teacher turnover. Considering that individual districts may lack the resources and capacity to track all costs associated with turnover, these estimates offer a ballpark figure of teacher turnover costs. In addition, these estimates can be used to consider the potential cost-effectiveness of programs or policy changes that may increase teacher retention.

This tool also comes with several limitations that are crucial for understanding the scope and applicability of these estimates. First, the tool does not differentiate between costs for various types of turnover. For example, the calculator does not account for differences in costs for teachers leaving the district compared to teachers transferring within the same district or moving into different roles within their current schools or districts. The study of Boston Public Schools includes separate estimates for “leavers” (i.e., those teachers leaving the district) and “changers” (those leaving teaching but staying in another role within the district), and their estimates indicate that the costs were considerably lower for changers.<sup>15</sup> Similarly, the analyses of Granville County Public Schools and Jemez Valley Public Schools differentiated between teachers leaving the district (“leavers”) and those switching schools within the district (“movers”), and these estimates indicated that the cost per mover was about one sixth of the cost per leaver.<sup>16</sup> The costs for leavers were used in this calculator.

The calculator does not differentiate costs based on the timing of turnover or the type of teachers. The studies included in this tool do not capture the differences in costs between within-year leavers and end-of-year leavers. While within-year teacher turnover is less common than end-of-year turnover,<sup>17</sup> the costs to replace a teacher midyear are likely higher than replacing a teacher at the end of the year due to immediate replacement costs, including the need to pay for substitute teachers while finding a replacement. The calculator also does not take into account potential differences in costs across teaching assignments. In their study of Boston Public Schools, Levy et al. (2012) examined the financial cost of turnover for all teachers and also for science teachers exclusively, finding much higher turnover costs for science teachers because of additional investments in recruiting and training for science teachers specifically.

Another limitation is that the calculator cannot account for all differences in costs across geographic regions, district contexts, or time. As shown in [Table 1](#), the per-teacher costs vary considerably across districts. Among the nine districts studied, there is a moderately strong relationship between district size and per-teacher costs (see [Figure 1](#)). However, the calculator cannot account for all potential differences in costs across districts, including how costs may vary in different geographic regions and contexts. Notably, all five studies used to create these estimates were published more than 10 years ago, and the underlying years of data collection ranged from 2003–04 to 2007–08. While the inflation adjustments account for some differences in rising costs across time, these estimates may not fully account for any changes in separation, recruitment, hiring, and training practices that have occurred in the past

2 decades. For example, districts may now be more likely to conduct recruitment and hiring virtually or may be more likely to offer compensation for mentor teachers working with new hires. These changes in practices may have implications for costs that cannot be captured here.

Finally, our analysis does not fully capture the comprehensive costs of turnover, financial or otherwise. The impact of turnover on student learning has been well documented in various studies,<sup>18</sup> and turnover—especially for schools with consistently high levels of turnover across years—may also destabilize school climate.<sup>19</sup> For example, prior literature finds that teacher turnover negatively impacts student academic performance in reading and math and may also undermine remaining teachers who must take on new assignments, potentially compounding negative impacts on student learning.<sup>20</sup> For other teachers in the school, turnover and staff instability can weaken professional ties and collaborative support among staff. These “hidden” costs, though more difficult to quantify financially, are important to consider as consequences associated with teacher turnover.

## Appendix A: Description of Studies

Study	District	Factors included in estimated cost	Estimated turnover cost per teacher
Barnes, G., Crowe, E., & Schaefer, B. (2007). <i>The cost of teacher turnover in five school districts: A pilot study</i> . National Commission on Teaching and America's Future.	Chicago Public Schools	The turnover costs collected for Chicago Public Schools included the district-level cost of teacher recruitment, hiring, processing, professional development, and the training of new teachers. Chicago Public Schools did not have data on school-level costs (e.g., interviewing, hiring process, orientation). Barnes et al. (2007) used the school-level cost information from Milwaukee Public Schools to produce a full cost estimate. This analysis did not capture the cost of substitutes who covered classrooms after midyear departures, or other separation costs.	\$17,872 per teacher (for the 2003–04 school year) Adjusted for inflation: \$29,762
Barnes, G., Crowe, E., & Schaefer, B. (2007). <i>The cost of teacher turnover in five school districts: A pilot study</i> . National Commission on Teaching and America's Future.	Granville County Public Schools	The turnover costs for Granville County Public Schools included district- and school-level costs for separation, hiring, and training. Cost estimates for the Granville County Public Schools were determined using district information and cost estimates from four focus schools. School-level focus groups were used to find an average cost per school. This analysis did not capture the cost of substitutes who covered classrooms after midyear departures, or any other separation costs.	\$9,875 per teacher (for the 2003–04 school year) Adjusted for inflation: \$16,445

Study	District	Factors included in estimated cost	Estimated turnover cost per teacher
<p>Barnes, G., Crowe, E., &amp; Schaefer, B. (2007). <i>The cost of teacher turnover in five school districts: A pilot study</i>. National Commission on Teaching and America’s Future.</p>	<p>Jemez Valley Public Schools</p>	<p>The turnover costs for Jemez Valley Public Schools included recruitment, administrative processing, training, and transfer costs. Because Jemez Valley Public Schools is a small district, the cost information was collected through physical documents and interviews with school and district staff, rather than a centralized database. There were not separate costs at the school and district levels. This analysis did not capture the cost of substitutes who covered classrooms after midyear departures, or other separation costs.</p>	<p>\$4,366 per teacher (for the 2003–04 school year) Adjusted for inflation: \$7,270</p>
<p>Barnes, G., Crowe, E., &amp; Schaefer, B. (2007). <i>The cost of teacher turnover in five school districts: A pilot study</i>. National Commission on Teaching and America’s Future.</p>	<p>Milwaukee Public Schools</p>	<p>The turnover costs collected for Milwaukee Public Schools included district personnel costs associated with replacing teachers along with school-reported costs. The district was not able to provide “other-than-personnel” costs, including costs for advertising, reference checks, testing reimbursement, and recruiting trip costs. Barnes et al. (2007) used estimates for “the ratio of personnel costs to other-than-personnel costs” from Granville County Public Schools to fill out much of the remaining information to produce a full estimated cost. The authors also added district costs associated with professional development and teacher training, using estimates from other study districts. To estimate Milwaukee’s school-level costs, Barnes et al. (2007) surveyed principals from eight schools and averaged the results. This analysis did not capture the cost of substitutes who covered classrooms after midyear departures, or other separation costs.</p>	<p>\$15,325 per teacher (for the 2003–04 school year) Adjusted for inflation: \$25,521</p>



Study	District	Factors included in estimated cost	Estimated turnover cost per teacher
<p>Levy, A. J., Joy, L., Ellis, P., Jablonski, E., &amp; Karelitz, T. M. (2012). Estimating teacher turnover costs: A case study. <i>Journal of Education Finance</i>, 38(2), 102–129.</p>	<p>Boston Public Schools</p>	<p>Turnover costs included the district-level and school-level costs for separation, recruiting and hiring, new teacher support, and professional development investments.</p> <p>The researchers gathered cost estimates at the district and school levels through interviews with district leaders, school leaders, and Human Resources staff. Their school-level analysis focused on four case study schools. They did not include the cost of the return to retirees of accrued and paid sick time. Data for midyear replacement costs, such as long-term substitutes, were unavailable.</p> <p>Levy et al. (2012) offered estimated costs accounting for salary differentials between exiting and entering teachers. The calculator used their estimated cost without accounting for salary differentials.</p>	<p>\$19,460 per teacher (for the 2006–07 school year)</p> <p>Adjusted for inflation: \$29,650</p>
<p>Milanowski, A., &amp; Odden, A. (2007). <i>A new approach to the cost of teacher turnover</i>. School Finance Redesign Project, Center on Reinventing Public Education.</p>	<p>Unidentified urban district</p>	<p>Turnover costs included the district-level and school-level costs for separation, cost of replacement staffing (staff time recruiting, advertising, travel to job fairs, time interviewing, corresponding with applicants, etc.), and the cost of training (induction and general teacher training).</p> <p>Milanowski and Odden (2007) gathered district-level data and school-level cost data from a sample of eight schools to determine total turnover costs. They also offered estimates that accounted for salary differentials and performance productivity loss. These estimates were not included in the calculator.</p>	<p>\$15,413 per teacher (for the 2005–06 school year)</p> <p>Adjusted for inflation: \$23,971</p>

Study	District	Factors included in estimated cost	Estimated turnover cost per teacher
<p>Synar, E., &amp; Maiden, J. (2012). A comprehensive model for estimating the financial impact of teacher turnover. <i>Journal of Education Finance</i>, 38(2), 130–144.</p>	<p>Tulsa Public Schools</p>	<p>Turnover costs included the district-level costs of separation, hiring, and training. The researchers used the terminated teacher database provided by the district and interviewed district staff on the tasks and costs of each category to determine the cost of teacher turnover. The study does not account for school-level costs. Synar and Maiden (2012) also offered an estimate that accounted for performance productivity loss. The calculator used their estimated cost without accounting for performance productivity loss.</p>	<p>\$8,354 per teacher (for the 2007–08 school year) Adjusted for inflation: \$12,206</p>
<p>Watlington, E., Shockley, R., Guglielmino, P., &amp; Felsher, R. (2010). The high cost of leaving: An analysis of the cost of teacher turnover. <i>Journal of Education Finance</i>, 36(1), 22–37.</p>	<p>Broward County School District</p>	<p>The turnover costs were drawn from district budgets and included separation costs, recruitment and hiring costs, and new teacher induction and professional development costs. This analysis did not include school-level costs.</p>	<p>\$12,652 per teacher (for the 2004–05 school year) Adjusted for inflation: \$20,461</p>
<p>Watlington, E., Shockley, R., Guglielmino, P., &amp; Felsher, R. (2010). The high cost of leaving: An analysis of the cost of teacher turnover. <i>Journal of Education Finance</i>, 36(1), 22–37.</p>	<p>St. Lucie County School District</p>	<p>The turnover costs were drawn from district budgets and included separation costs, recruitment and hiring costs, and new teacher induction and professional development costs. This analysis did not include school-level costs.</p>	<p>\$4,631 per teacher (for the 2004–05 school year) Adjusted for inflation: \$7,489</p>

Note: Cost estimates from each study were adjusted for inflation using the [Consumer Price Index inflation calculator](#) to reflect the dollar amount in January 2024.

# Endnotes

1. Barnes, G., Crowe, E., & Schaefer, B. (2007). *The cost of teacher turnover in five school districts: A pilot study*. National Commission on Teaching and America's Future; Milanowski, A., & Odden, A. (2007). *A new approach to the cost of teacher turnover*. School Finance Redesign Project, Center on Reinventing Public Education; Watlington, E., Shockley, R., Guglielmino, P., & Felsher, R. (2010). The high cost of leaving: An analysis of the cost of teacher turnover. *Journal of Education Finance*, 36(1), 22–37.
2. DeFeo, D. J., Tran, T., Hirshberg, D., Cope, D., & Cravez, P. (2017). *The cost of teacher turnover in Alaska*. University of Alaska Anchorage, UAA Center for Alaska Education Policy Research. <https://scholarworks.alaska.edu/bitstream/handle/11122/7815/2017-CostTeacher.pdf?sequence=1>. DeFeo et al. (2017) calculated per-teacher turnover costs by accounting for district-level separation, recruitment, hiring, and training costs. The estimated turnover cost per-teacher is \$27,800 in 2024 dollars.
3. We examined financial differences between rural, suburban, and urban districts using fiscal data from the Common Core of Data and examined analyses that compare costs across these geographic contexts. Nationally, average teacher salaries are about \$10,000 lower in rural schools compared to urban schools. There is not clear evidence that expenditures for other costs are lower, on average, and some research has found higher costs in rural districts. For example, see: Kolbe, T., Baker, B. D., Atchison, D., Levin, J., & Harris, P. (2021). The additional cost of operating rural schools: Evidence from Vermont. *AERA Open*, 7. <https://doi.org/10.1177/2332858420988868>; U.S. Department of Education. (2022). *Average total income, base salary, and other sources of school and nonschool income for full-time teachers in public and private elementary and secondary schools, by selected characteristics: School year 2020–21*. National Center for Education Statistics. [https://nces.ed.gov/programs/digest/d22/tables/dt22\\_211.10.asp?current=yes](https://nces.ed.gov/programs/digest/d22/tables/dt22_211.10.asp?current=yes)
4. Barnes, G., Crowe, E., & Schaefer, B. (2007). *The cost of teacher turnover in five school districts: A pilot study*. National Commission on Teaching and America's Future. The smallest district in the Barnes et al. (2007) study (Jemez Valley) did not have separate turnover costs at the school and district level due to the small size.
5. Watlington, E., Shockley, R., Guglielmino, P., & Felsher, R. (2010). The high cost of leaving: An analysis of the cost of teacher turnover. *Journal of Education Finance*, 36(1), 22–37.
6. U.S. Bureau of Labor Statistics. (2024). CPI inflation calculator. [https://www.bls.gov/data/inflation\\_calculator\\_inside.htm](https://www.bls.gov/data/inflation_calculator_inside.htm)
7. Barnes, G., Crowe, E., & Schaefer, B. (2007). *The cost of teacher turnover in five school districts: A pilot study*. National Commission on Teaching and America's Future.
8. Levy, A. J., Joy, L., Ellis, P., Jablonski, E., & Karelitz, T. M. (2012). Estimating teacher turnover costs: A case study. *Journal of Education Finance*, 38(2), 102–129.
9. Milanowski, A., & Odden, A. (2007). *A new approach to the cost of teacher turnover*. School Finance Redesign Project, Center on Reinventing Public Education.
10. Synar, E., & Maiden, J. (2012). A comprehensive model for estimating the financial impact of teacher turnover. *Journal of Education Finance*, 38(2), 130–144.
11. Watlington, E., Shockley, R., Guglielmino, P., & Felsher, R. (2010). The high cost of leaving: An analysis of the cost of teacher turnover. *Journal of Education Finance*, 36(1), 22–37.
12. Each study used a different approach to estimate for losses in productivity. Milanowski and Odden (2007) tried to estimate the difference in leaving and incoming teachers in terms of their effectiveness (as measured by student test scores) and then estimate the value of that difference in student learning. Their analysis included three different estimates of lost productivity, and the per-teacher estimate used in the calculator relies on the estimate before these productivity losses are included. Synar and Maiden (2012) estimated productivity losses based on an approach that theorized that new staff require 5 months to reach full productivity. As such, their estimates included 4 months of salary costs for all new hires. The per-teacher estimate used in the calculator relies on the estimate before these productivity losses are included.
13. Notably, Levy et al. (2012) could not get information on costs associated with midyear replacement costs, such as long-term substitutes, which may partially explain why separation costs were such a small percentage of their total. For more, see Levy, A. J., Joy, L., Ellis, P., Jablonski, E., & Karelitz, T. M. (2012). Estimating teacher turnover costs: A case study. *Journal of Education Finance*, 38(2), 102–129.
14. Milanowski, A., & Odden, A. (2007). *A new approach to the cost of teacher turnover*. School Finance Redesign Project, Center on Reinventing Public Education.

15. Levy, A. J., Joy, L., Ellis, P., Jablonski, E., & Karelitz, T. M. (2012). Estimating teacher turnover costs: A case study. *Journal of Education Finance*, 38(2), 102–129.
16. Barnes, G., Crowe, E., & Schaefer, B. (2007). *The cost of teacher turnover in five school districts: A pilot study*. National Commission on Teaching and America's Future.
17. Redding, C., & Henry, G. T. (2018). Leaving school early: An examination of novice teachers' within- and end-of-year turnover. *American Educational Research Journal*, 56(1), 204–236. <https://doi.org/10.3102/0002831218790542>
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