



Teacher Staffing in Providence Public Schools: Key Metrics and Strategic Insights

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This year, challenges in staffing America's public schools have erupted onto the front page of newspapers across the country. Sources as varied as the New York Times, Fox News, the American Federation of Teachers, and the American Enterprise Institute have all reported on the crisis in the teaching profession. Districts across the country are reporting unprecedented staffing shortages as schools begin the long process of recovering from the pandemic. Locally, there are similar reports of RI schools facing teacher shortages and high number of vacancies at the start of the school year.

However, as we look at the data from the past year, the overall picture is somewhat more mixed. It is clear that classroom teaching vacancies in Providence Public School District (PPSD) remain quite high and that teacher retention rates have fallen during the pandemic and state intervention. However, unlike in many other districts across the country, the number of classroom teaching vacancies was not unprecedented this year. And the number of teachers who have left the classroom has only ticked up slightly from 2021.

While staffing classrooms remains a critical challenge and efforts to retain effective teachers are critical to the turnaround effort, we have not seen a mass exodus in Providence. If anything, teacher retention in Providence still remains reasonably high compared to other large urban districts.¹ That said, the persistent classroom vacancies present an ongoing and stubborn challenge for the district to solve. Here, teacher hiring appears to be a key contributing factor, as Providence continues to attract relatively few applicants to teaching positions.

The Annenberg Institute's Rhode Island education research initiatives bring together local education leaders and researchers to solve pressing educational challenges, with a specific focus on student engagement and teacher learning. Drawing on the complementary expertise and earned trust of partners, these initiatives seek to improve Rhode Island student and school experiences through stronger use of data and evidence while producing research that has impact on a national scale.

This memo reports on our third year of analysis on teacher staffing in the Providence Public School District. We present six key metrics about teacher retention, hiring, and vacancies:

- PPSD teacher attrition is higher than at the start of the pandemic and increased slightly in 2022, but retention remains relatively high compared to national averages. The long-term change in turnover has been driven both by an increase in retirements and by an increase in resignations among early and mid-career teachers.
- More teachers are leaving PPSD to go to other RI districts than entering from RI districts -- a shift from previous years.
- More teachers are exiting the district early in the school year post-pandemic than pre-pandemic, although trends this fall were similar to last year.
- While the applicant pool has grown, it continues to be too small to meet demand, particularly in high-needs subject areas.
- The teaching force overall is not growing more diverse, but some schools have made more progress than others.
- Vacancies remain a stubborn but not unprecedented challenge.

We also offer some strategic insights for staffing classrooms that emerge from the data:

- Vacancies are primarily driven by late resignations and by exits from teachers in high-needs subject areas.
- Retirements will continue to increase in coming years because PPSD has an older workforce.
- Early contract postings and general, non-school specific postings have attracted more applicants in high-need areas.
- Former substitute teachers and teacher assistants who transition into classroom teacher roles represent a growing and more diverse pipeline into the classroom.

KEY METRICS

PPSD classroom teacher retention rate	88%
Net flow of teachers (teachers exiting PPSD for jobs in other RI districts vs teachers moving to PPSD from other districts)	18
Number of teachers who exited the district in the fall (through November)	25
Applications per posting	4
Share of Teachers of Color	21.8%
Beginning of year classroom teaching vacancies	89

KEY FINDINGS & METRICS

PPSD teacher attrition is higher than at the start of the pandemic/state intervention and increased slightly in 2022, but retention remains relatively high compared to national averages.

PPSD classroom teacher retention rate
88%

For each of the last two years, approximately 275 PPSD teachers have left the classroom including exits from the district, retirements, moves to non-teaching positions, and teachers going on leave. As shown in Figure 1, teacher exits increased this year, with 15 more teachers retiring or exiting the district than 2020-21. This level of teacher attrition is higher than before the pandemic, but overall, district retention rates continue to hover just below 90 percent which is on par with many other, large, urban districts.

Turnover rates in 2021-22 were similar to 2020-21 and remained substantially higher than pre-pandemic levels

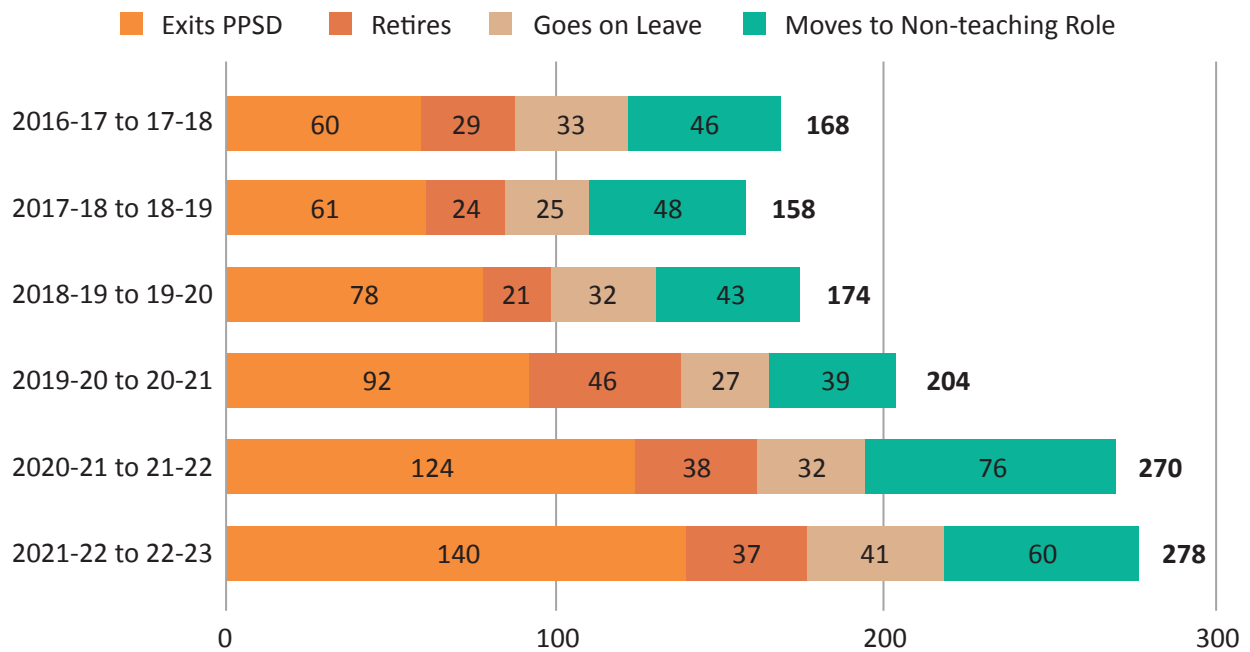


Figure 1. Classroom Teacher Exits by Year and Cause

The trend in PPSD mirrors a broader statewide decline in teacher retention since the pandemic began. Across the pandemic, PPSD saw its biggest drop in retention two years ago, whereas retention rates in other districts dropped more this past year. Because year-to-year numbers can shift substantially in smaller districts, we look at 3-year retention rates – the share of teachers in a given year who remain teaching in the district three years later. These rates can more accurately capture broader staffing challenges.

About the Data

Our analysis uses teacher employment data from two separate sources: the Providence Public School District and the Rhode Island Department of Education. Each data source requires a somewhat different definition of “teacher”. PPSD data is the most detailed, allowing us to identify traditional classroom teachers – that is, positions with a class of students assigned to them – and differentiate them from other instructional positions. Because we focus when possible on classroom teachers, our analyses differ somewhat from other public reporting that often highlights all employees in the teacher collective bargaining unit. The RIDE data defines teacher more broadly based on certification; as such, “teacher” encompasses not only traditional classroom teachers but also positions like instructional coaches and specialists who might work with smaller groups of students in pull-out settings.

Figure 2 shows a decline in 3-year retention rates across the state from 85% pre-pandemic to 82% in the last three years. Providence’s 3-year retention rate was initially on par with other districts in the state, but fell from 84% to 75%. This decline substantially exceeded that of other Rhode Island urban core districts, but remains higher than pre-pandemic rates from 16 other urban districts nationally for which comparable data is available.ⁱⁱ

Since the pandemic, 3-year retention rates fell modestly statewide and more substantially in Providence

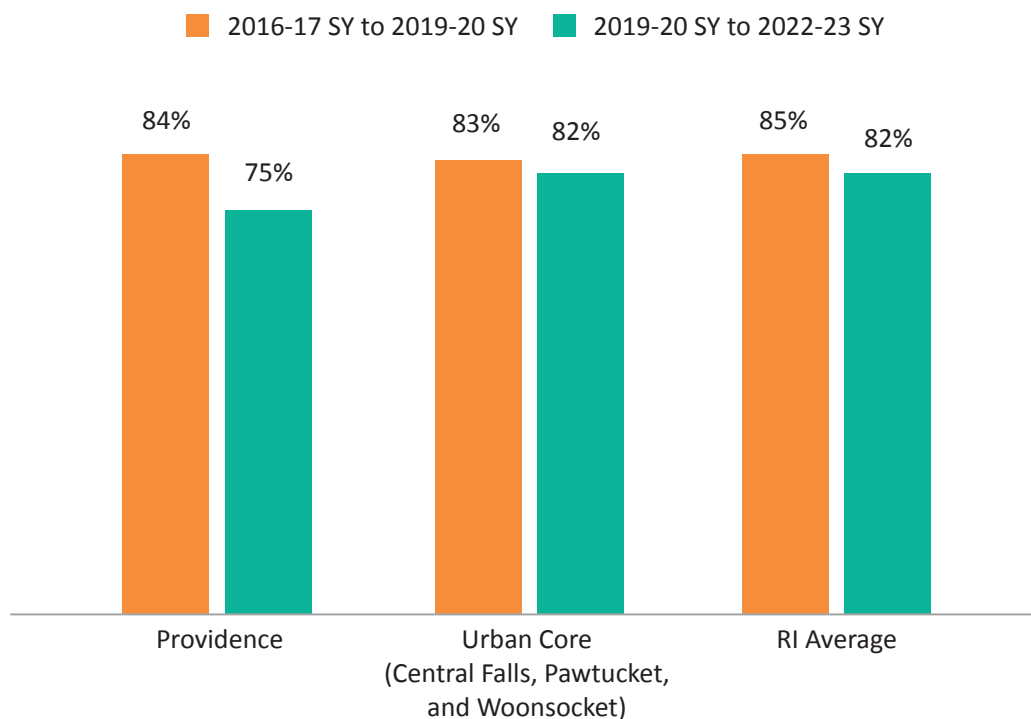


Figure 2. PPSD 3-Year Retention Rate compared to other RI Districts

The long-term change in turnover has been driven both by an increase in retirements and by an increase in resignations among early and mid-career teachers.

Retirements have nearly doubled in PPSD since the pandemic and state intervention from an average of 24 teachers retiring per year up to 40. As we show later in this brief, retirements rarely contribute to long-term vacancies. Resignations from early and mid-career teachers, which have also increased substantially since before the pandemic/takeover, are much more likely to lead to staffing challenges. Teacher resignations in particular can be an important marker of teacher well-being in the district, and this increase suggests the need for increased support.

As seen in Figure 3, the retention rates among teachers on salary steps 2-9 have dropped substantially. A concerted effort to retain these teachers at rates similar to that of pre-pandemic levels would result in approximately 25 fewer exits each year – or enough to bring PPSD’s retention rate near any comparable district in the state.

Retention for early and mid-career teachers decreased at a higher rate since the pandemic and takeover compared to other teachers. A similar decrease is seen among teachers eligible to retire.

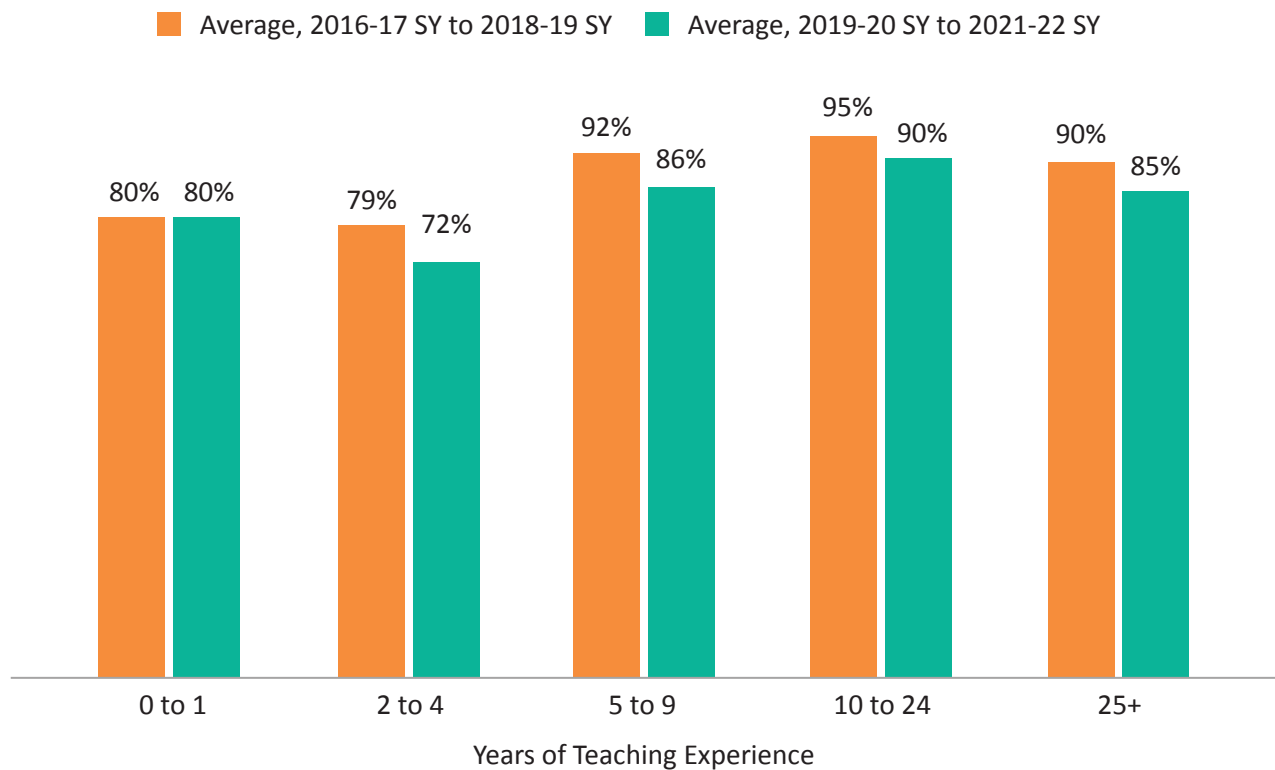


Figure 3. Retention Rate by Experience

More teachers are leaving PPSD to go to other RI districts than entering from RI districts -- a shift from previous years.

Net flow of teachers (teachers exiting PPSD for jobs in other RI districts vs teachers moving to PPSD from other districts)

18

Teachers may leave classroom teaching positions for many reasons - to retire, because their family is moving out of state, because they move to a new role (e.g., instructional coach or assistant principal), because they do not feel supported in their current position, because of difficult working conditions in their school, or because they find another teaching position that is a better fit. While we do not have data on why teachers leave PPSD, we can observe this last type of move -- teachers who choose to leave the district to work in another public school in the state. Understanding the net flow -- the number of teachers leaving compared to the number entering -- is a useful metric. Pre-pandemic and takeover, PPSD attracted more teachers from other districts than it lost. As seen in Figure 4, this trend has now reversed. Prior to the 2022-23 school year, 40 teachers moved from PPSD to other districts (about 15 more than pre-pandemic levels), while 22 teachers entered PPSD from other RI districts (about 10 fewer than pre-pandemic levels).

Overall, these numbers are not huge -- the net flow of 18 teachers out of Providence represents just 1% of the teaching workforce. But, it does exacerbate staffing challenges in two ways. First, these teachers tend to leave PPSD later than other teachers. Second, cross-district moves (both in and out of the district) are concentrated in high-need subject areas. Two thirds of all teachers who left over the last 5 years were in hard-to-fill subjects.

PPSD has lost more teachers to other districts than it has attracted from other districts since the pandemic/takeover

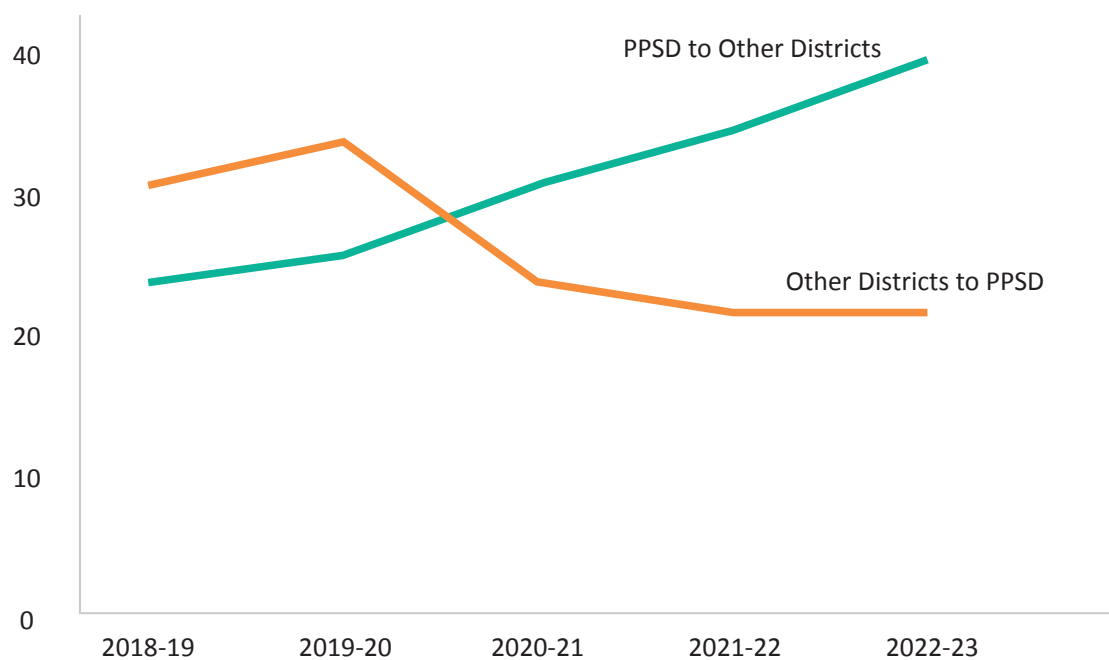


Figure 4. Cross District Movers by Year

More teachers are leaving PPSD early in the school year post-pandemic than pre-pandemic, although trends this fall were similar to last year.

Number of teachers who exited the district in the fall (through November)

25

Every fall, it's typical that a few teachers leave the classroom at the start of the school year. This turnover can arise for a number of reasons – newly accepted jobs may be a poor match, personal and family matters may arise, or other opportunities in a different district may present themselves. Before the pandemic and state intervention, an average of 14 teachers each year left the district between mid-September and the end of November. In the past few years, the average has climbed to 22. We see 28 fall leavers in 2022 and 25 in 2023.ⁱⁱⁱ Note that our data for the current school year only goes through November; as such, we cannot report on mid-year leavers in the past few months. Historically, there is typically an increase in resignations right before or after winter break and into the spring.

Like cross-district movers, these teachers exacerbate staffing challenges. As the district works to fill start of the year vacancies, the additional vacancies that arise from fall leavers become increasingly hard to fill with a dwindling applicant pool.

While the applicant pool has grown, it continues to be too small to meet demand, particularly in high-needs subject areas.

Applications per posting

4

This year, PPSD received more external applicants overall, and more in high-need subjects, than ever before. But, given the sizeable increase in postings, the applications per posting remained quite low in high-need areas. As seen in Figure 5, mathematics, science, secondary ESL, special education, and bilingual postings all receive fewer than 4 applications per position, on average. Given that some teachers apply to multiple positions, we also examine the number of unique external applicants per posting. This has remained quite low, with only 1.2 unique external candidates applying for each position; however, the lack of an internal posting window this year made the metric not comparable to past years.

During the 2022-2023 hiring season, only elementary generalist positions attracted more than 10 external applications per position, on average.

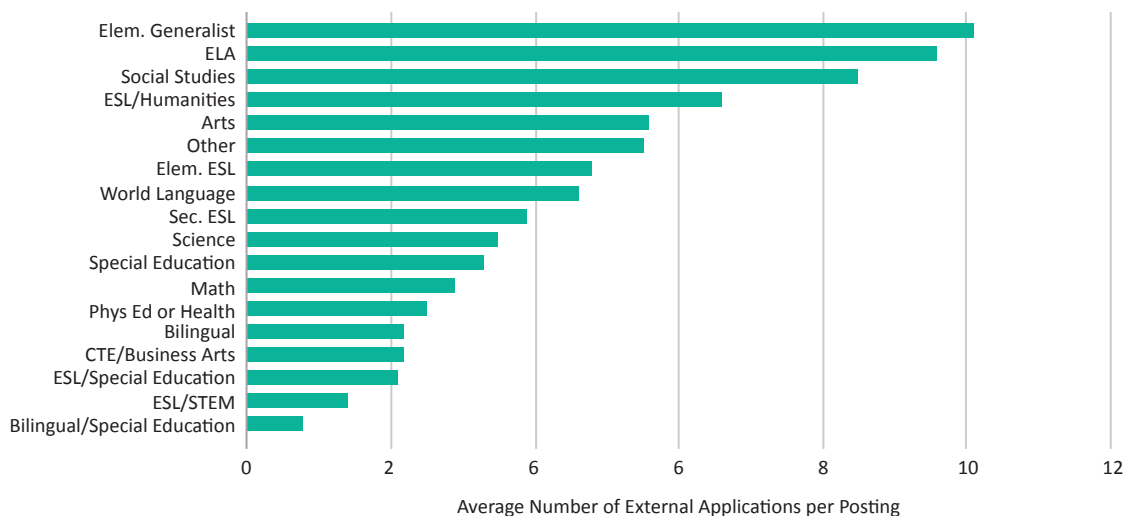


Figure 5. Average External Applications by Subject, 2022-2023 Hiring Season

Given changes in the hiring process, including the elimination of an internal transfer window, PPSD did post more jobs this year than in past years. So, we see both a large increase in the number of applicants and a fairly consistent number of unique applications per posting. As a result, it is difficult to compare this metric over time or to know whether the district would have seen the same increase in external applicants had they had fewer postings.

That said, regardless of any trends over time, the total number of applicants is quite low in most areas. Pre-pandemic, a Frontline study suggested that the average teaching position nationally received 28 applications.^{iv} The pandemic has certainly exacerbated the recruitment challenge across the country and across sectors. Applicant pools are tight in much of the labor market. This decline in the labor force has been acutely felt in the education sector, as districts struggle to attract applicants, report smaller applicant pools than usual, and identify a lack of applicants as the key driver of shortages.^v In Rhode Island, many districts that report teacher shortages also report a lack of qualified applicants.^{vi}

The PPSD teaching force overall is not diversifying at a rate to meet the goal set forth in the turnaround action plan, but some schools have made more progress than others.

Share of Teachers of Color

21.8%

Overall, the district's teacher workforce is diversifying at a rate of less than 0.5 percentage points a year and is not on track to meet the goals set by the PPSD turnaround team. PPSD has made some strides, here, nearly doubling the number of new teachers of color it has brought into the district over the last five years. However, these gains have been cancelled out by an increase in turnover among teachers of color over the past five years.

There are two primary explanations for this increased turnover among teachers of color. First, and most importantly, turnover has increased across the board in Providence – for White teachers and teachers of color. Second, turnover tends to be higher (nationally as well as locally) among early career teachers and teachers in certain subject areas. In particular, we see relatively more teachers of color in bilingual/ESL classrooms, a subject that tends to have high turnover rates. The increase in turnover among teachers of color over the past five years is no different than patterns for White teachers once we compare teachers in the same subject areas and with the same level of teaching experience. And, overall in 2022, turnover rates for teachers of color on average were on par with those for White teachers.

Critically, there are some bright spots within the district. In Figure 6, we locate schools based on the composition of their teacher workforce five years ago (horizontal axis) and the change in the share of teachers of color in the school since then (vertical axis). We include dotted lines at the district average. Schools to the right of the dotted line are those that, in 2018-19, had more diverse workforces. Those above the dotted line are those that have increased the share of teachers of color the most since then.

The district's turnaround action plan aimed to increase the percentage of educators of color in the total educator workforce from 20.5% in 2018-19 to 33% by 2024-25. Doing so would require average annual increases in the share of the workforce that identify as teachers of color by approximately two percentage points. This is no easy feat. The relatively high overall retention rate in the district, particularly in subject areas with a larger pool of diverse teacher applicants, means that there are fewer opportunities to fill positions. Counterintuitively, diversifying the workforce is easier when more teachers are leaving. If overall retention continues to hover around 88%, it would require the district to maintain this retention rate for teachers of color and increase the share of new hires of color to 40%. Currently, approximately 27% of new teachers identify as teachers of color, a substantial increase from pre-pandemic but not sufficient to meet the ambitious target. In fact, only six schools in the district diversified their workforce by an average of 2 percentage points a year over the past five years. Schools that had a more diverse teacher workforce than average and increased the diversity of the teaching workforce at higher rates than average (those in the upper right quadrant) are particularly encouraging.

Only 6 schools increased the share of teachers of color by 10 percentage points over the last five years.

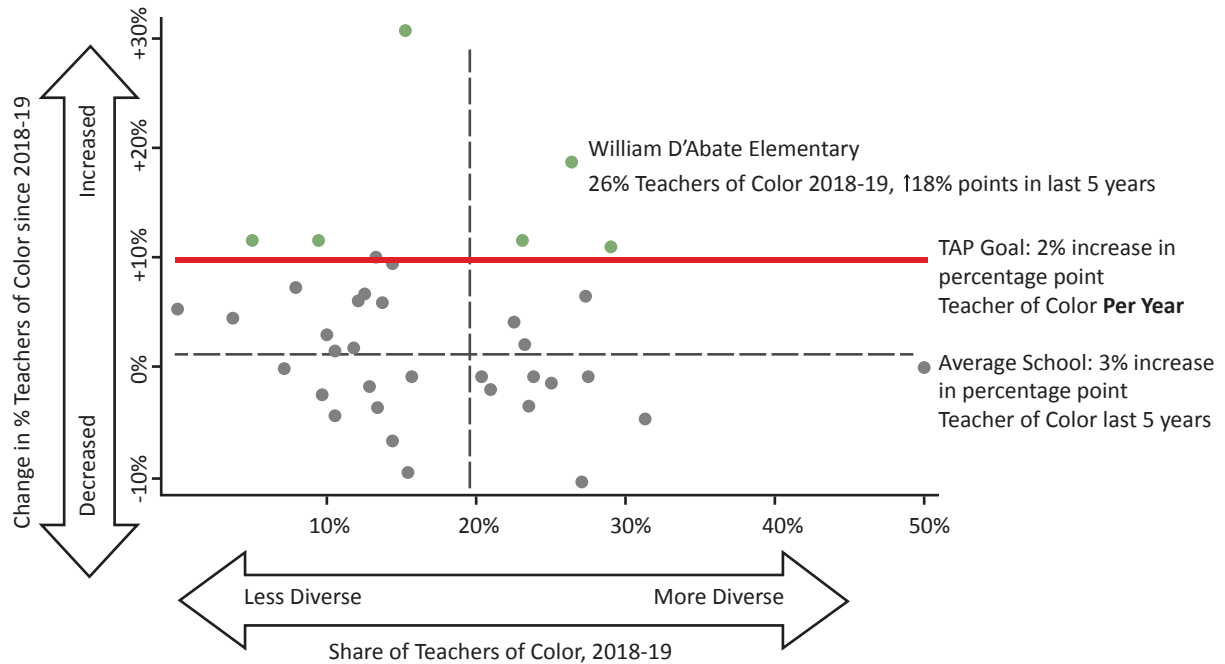


Figure 6. 2018-2019 Share of Teachers of Color vs. Change in Composition Last Five Years by School

Vacancies remain a stubborn but not unprecedented challenge.

Beginning of year classroom teaching vacancies

89

Providence started this past school year with around 90 unfilled teaching positions or classroom vacancies. Many of these students ended up in classrooms staffed by long-term substitute teachers.

Overall, and somewhat surprisingly in the face of all of the challenges of the past several years, PPSD's vacancy rate has stayed reasonably consistent across the last four years, in large part because the district hired more external teachers than in past years. As a result, 94% of classrooms were filled by the start of this school year; rates in past years have hovered between 94% and 96%.

Public reports for comparable districts in Massachusetts and Connecticut suggest similar challenges elsewhere. Boston, for example, reported just over 95% of classrooms filled, while Hartford reported a 93% fill rate by the start of the year.

STRATEGIC INSIGHTS

The central story highlighted by the metrics above is nuanced. While PPSD continues to struggle with vacancies and has seen a substantial increase in teacher turnover since the start of the pandemic and state intervention, these trends echo national and regional patterns and reflect broader structural challenges in the teacher labor market. If anything, PPSD continues to perform on par with or even somewhat better than national peers in staffing schools. However, the share of vacant classrooms has resisted meaningful improvement despite a commitment by PPSD leadership and a long-term turnaround goal aiming to reduce this number to 2 percent by 2025. Dramatic transformation in Providence is going to require sustained investment and effort to attract more teachers, create schools where teachers want to stay and thrive, and staff all classrooms consistently with highly effective teachers.

To this end, we provide a set of strategic insights that emerge from the data. In short, the district has been quite successful in filling positions in non-high need areas and those that are posted early. Nevertheless, beginning-of-the-year vacancies remain a core problem that PPSD must solve along the path to a stronger and more effective teacher pipeline. These strategic insights seek to offer a better understanding of what drives PPSD's vacancy rate and where efforts can be focused to cut it down. In the coming months, we will continue to explore in more detail the experiences of two important groups. First, we need to know more about the factors that influenced teachers, particularly teachers of color, who left the district. Second, we need to learn how RI educator preparation program graduates think of their career decisions in the state.

Vacancies are primarily driven by late resignations and by exits from teachers in high-needs subject areas.

We know timing matters. Jobs posted early in the hiring season are far more likely to be filled by the start of the year compared to jobs posted in the summer. This pattern holds true in Providence – of the 300 jobs that PPSD posted in March of 2022, 85% were filled by the start of the year compared to 20% of those that were posted in August. The vast majority of teaching jobs that were posted early and still were not filled were in high-need subject areas and received far fewer applications than the average position.

We also know that the cause of postings varies by month. In particular, postings that arise due to teacher resignations tend to be posted later and are more likely to be in high-needs areas. Only half of the postings that arise from a resignation are posted by March, compared to 80% of postings from retirements and more than two-thirds of postings from internal moves. Teachers who resign and notify the district late into the spring, and particularly over the summer, are much more likely to lead to start of year vacancies.

Retirements will continue to increase in coming years because PPSD has an older workforce.

While overall metrics provide important lenses into the district’s staffing practices, they often obscure important underlying patterns. The falling retention rate in PPSD over the past several years was due not only to an increase in teachers exiting the district but also to a doubling of teacher retirements. This reflected both an increase in retirement rates among eligible teachers and an increased share of teachers who were retirement eligible.

As seen in Figure 7, PPSD has a somewhat older workforce than the rest of the state. Indeed, a quarter of the teacher workforce in PPSD is within 5 years of retirement age, compared to 19% in the rest of the state. This has important implications for staffing, as we should expect to see even more retirements in coming years.

PPSD has a greater share of teachers over 50 than the state as a whole.



Figure 7. Share of the Workforce by Age in PPSD compared to other RI Districts, 2022-23

Early contract postings and general, non-school specific postings have attracted more applicants in high-need areas.

Last year, PPSD launched an early contract process that allowed the district to post jobs in December and extend contracts to applicants in high-need subject areas before knowing the specific position that would be available. As seen in Figure 8, these postings (as well as non-school specific postings used during the 2020-21 hiring season) attracted more candidates in high-need areas as compared to traditional school-specific postings, presumably because they happened quite early in the hiring season.

However, while early contract postings received more applicants than regular postings, only 7 applicants who were not offered positions in December applied again during the regular pool. Cultivating applicants who applied to early contract postings could be an opportunity to strengthen the pool during the regular hiring season.

Early contract postings and pooled postings received significantly more applications than traditional school-specific teacher positions.

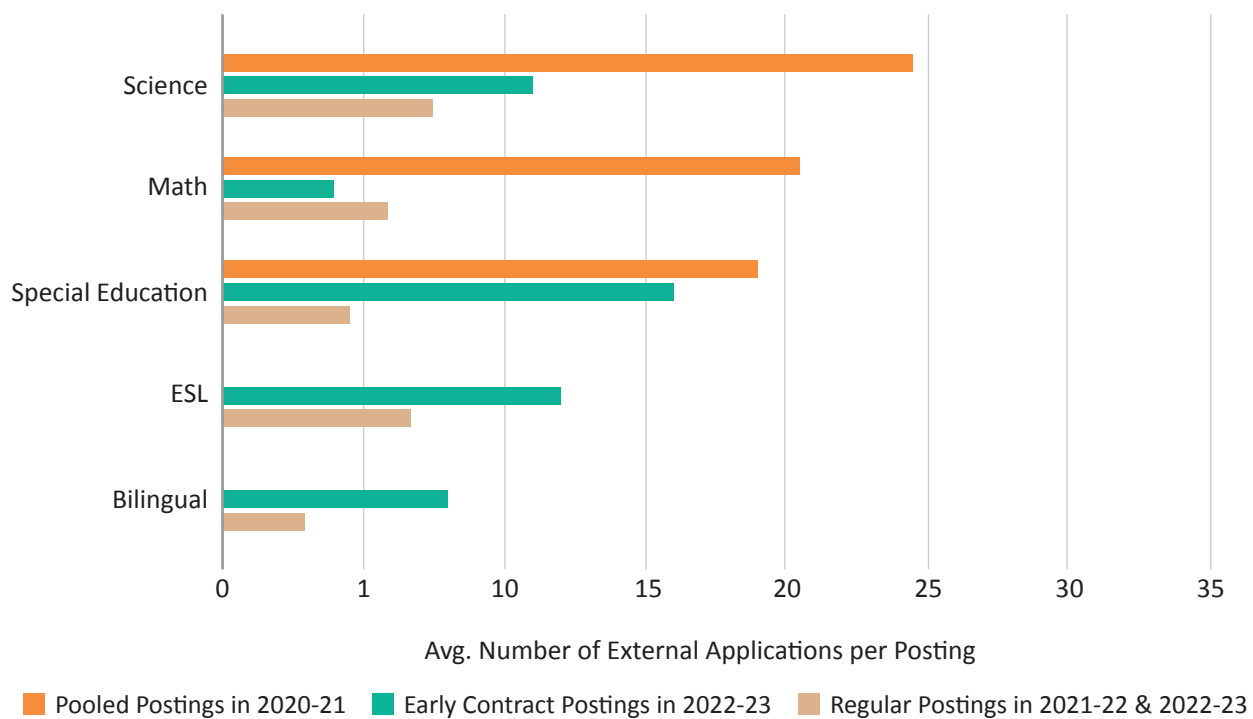


Figure 8: External Applications Per Posting by Type of Teacher Posting

Former substitute teachers and teacher assistants who transition into classroom teacher roles represent a growing and more diverse pipeline into the classroom.

Between 10 and 20 per diem substitutes transition into a permanent classroom teaching role each year. On the whole, substitutes moving into teaching roles are more diverse than the teacher workforce. Indeed, 50% of all per diem substitutes who moved into teaching positions over the last five years were teachers of color, mirroring the overall composition of the per diem substitute pool. Cultivating promising per diem substitutes and providing pathways into teaching could help PPSD increase its supply of teachers and diversify the teacher workforce.

Similarly, teaching assistants (TAs) who move into teaching roles are also more diverse. This is notable because the number of TAs moving into teaching positions has grown significantly in the last two years. Before the pandemic and takeover, only 2 or 3 TAs per year moved into teaching roles. This year, 10 TAs transitioned to classroom teaching roles (9 of whom identify as teachers of color). Continuing to provide pathways into the classroom for TAs through programs like the Equity Institute would strengthen this important pipeline.

ⁱ Diliberti, M.K. & Schwartz, H.L. (2023) Educator Turnover Has Markedly Increased, but Districts Have Taken Actions to Boost Teacher Ranks: Selected Findings from the Sixth American School District Panel Survey. Rand Research. Retrieved from: <https://bit.ly/3lqEmjz>

ⁱⁱ Papay, John P. and Bacher-Hicks, Andrew and Page, Lindsay C. and Marinell, William (2017). The Challenge of Teacher Retention in Urban Schools: Evidence of Variation from a Cross-Site Analysis. Available at SSRN: <https://ssrn.com/abstract=2607776> or <http://dx.doi.org/10.2139/ssrn.2607776>

ⁱⁱⁱ It is not obvious how to count fall exiters in annual retention figures presented above. If a fall exiter worked fewer than 30 days, we count them as leaving the prior year. If they worked more than 30 days, we count them as leaving in the current year.

^{iv} Combs, E. & Silverman, S. (2018). A Leak in the Pipeline: How Hiring Bias Might Be Compounding the Teacher Shortage. Frontline Research.

^v Deliso, Meredith. "How school districts and states are trying to attract teachers during the pandemic." ABC News, February 4, 2022. Retrieved from: <https://abcn.ws/3WJ1nUe>; Merod, Anna. "85% of district leaders say lack of applicants driving teacher shortages." K-12Dive, September 13, 2022. Retrieved from: <https://bit.ly/3JIR9Ge>

^{vi} Taylor, Tolly. "Superintendent Surveys: Most RI school districts facing staff shortage." WPRI, September 6, 2022. Retrieved from: <https://bit.ly/3JjUgO>