

Research Brief 2023 – 14:  
**Superintendent Attrition in Pennsylvania from 2014 to 2023**

Ed Fuller & Xinran Zhang

**Introduction**

There is growing concern over the shortage of superintendents, with recent reports from [EducationWeek](#) indicating that superintendent attrition has remained high since the pandemic. Specifically, they found that about 1 in 5 superintendents in the largest 500 districts have left their position. Nationally, according to Dr. Rachel White, the attrition rate increased from around 14% between 2020 and 2021 to 17% between 2022 and 2023.

In this study, we focus on this important issue by examining superintendent attrition from 2014 through 2023 and attrition rates by personal-, school-, and district-characteristics. We define attrition as a superintendent employed in year one who is not employed as a superintendent in a public school in Pennsylvania in year two. For all analyses in which superintendents are divided into groups for comparison, we created rolling three-year averages in which we averaged three consecutive annual attrition rates. So, for example, the 14-17 attrition rate is the average of three attrition rates: 2014 to 2015, 2015 to 2015, and 2016 to 2017. We provide a more detailed description of our methods at the end of this brief.

We find that superintendent attrition in Pennsylvania increased by 3.9 percentage points from 2021-22 to 2022-23 which was more than three times the next largest increase. The 16.8% superintendent attrition rate for 2022-23 was the highest since data were made available.

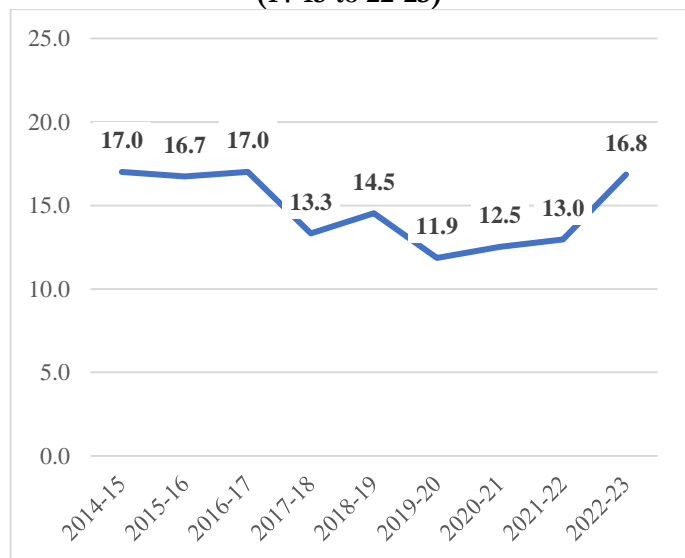
**Why Should We Care About Superintendent Attrition?**

There is consensus in the research community that superintendent attrition and turnover have a negative [consequence](#) on school district success and employee retention. Specifically, higher superintendent attrition and turnover rates are linked to increased teacher morale decline, student achievement drops, and institutional knowledge loss. Further, finding a new superintendent can also be time-consuming and disruptive, leading to staff [apprehension](#) and low morale, potentially affecting the school district's perception. Thus, stakeholders, including educators, parents, and policymakers, should prioritize addressing superintendent attrition, as the stability of educational leadership is directly related to the sustained school quality and long-term success.

**Overall Attrition**

**Figure 1** displays the overall attrition rate for Pennsylvania superintendents from 2014 through 2023. There were constant fluctuations in the attrition rates over this time. From 2014-15 to 2016-17, there was no significant fluctuation in the data, with an attrition rate of around 17.2%, followed by a notable dip to 13.5% in 2017-18. Subsequently, the latest data for 2022-23 shows a significant spike to 16.8%, indicating a noteworthy change in superintendent turnover trends, which is the second highest since accurate employment records have been kept.

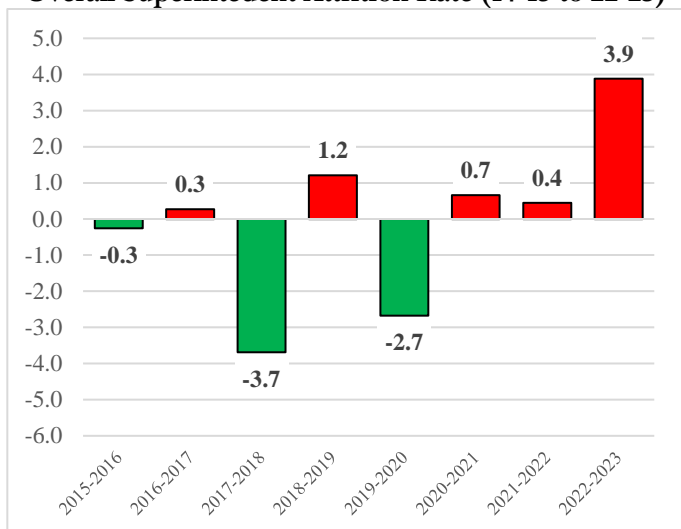
**Figure 1: Annual Superintendent Attrition Rates (14-15 to 22-23)**



Data Source: PDE Educator Employment files; Authors' analysis

In **Figure 2**, the green bars represent declines in the principal attrition rate while the red bars indicate an increase in the principal attrition rate. Each bar represents the percentage point change from one year to the next. The 3.9 percentage point change from 2022 to 2023 was the largest change in principal attrition in either direction. In fact, it was more than three times as large as any other change in the principal attrition rate.

**Figure 2: Annual Percentage Point Change in the Overall Superintendent Attrition Rate (14-15 to 22-23)**



Data Source: PDE Educator Employment files; Authors' analysis

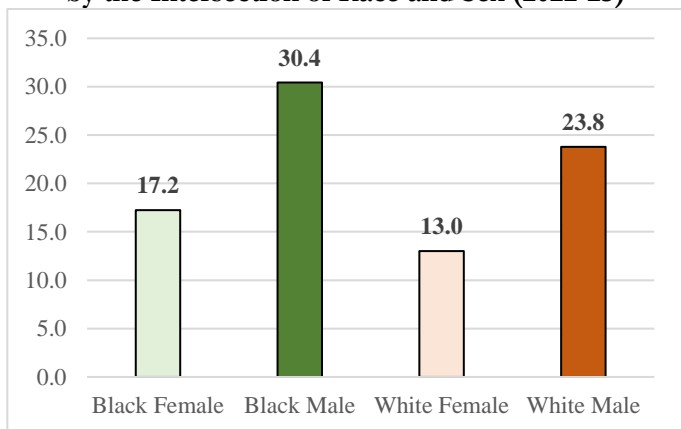
**Attrition by the Intersection of Race and Sex**

**Figure 3** presents the 2022-2023 attrition rates by the intersection of race and gender. Because of very small numbers of American Indian, Asian, Pacific Islander, and multi-race superintendents, we do not present data on these individuals.

Black male superintendents experienced a notably high attrition rate of 30.4%. Thus, nearly one in three Black male superintendents left their positions during this period. Following closely behind were White male superintendents with an attrition rate of 23.8%. Black females exhibited the third highest attrition rate of 17.2%, and the lowest attrition rate among all groups was for White female superintendents at 13.0%.

Male superintendents had slightly higher attrition rates than their female counterparts. This is similar to the trend observed among teachers, where male teachers generally exhibited greater attrition rates compared to female teachers. However, this is in contrast to the trend observed among principals in which female principals generally had greater attrition rates than male principals.

**Figure 3: Superintendent Attrition Rate by the Intersection of Race and Sex (2022-23)**



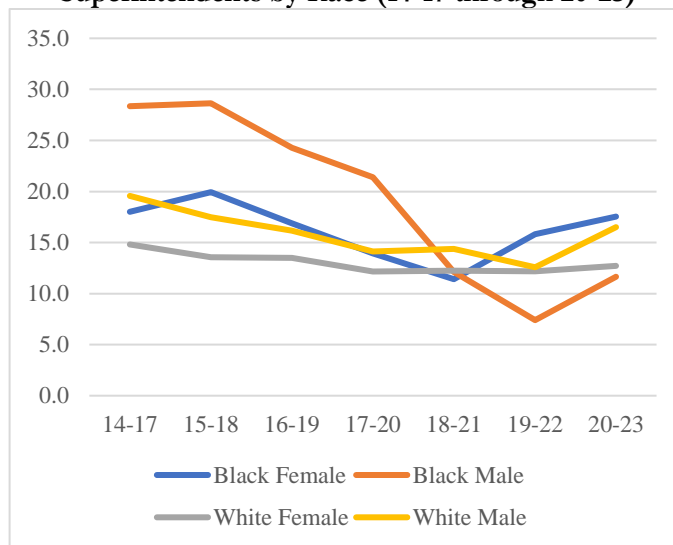
Data Source: PDE Educator Employment files; Authors' analysis

Figure 4 presents the superintendent attrition rates over time for the same racial-gender groups.

In general, the attrition rates for all four groups declined from 14-17 through 18-21 with one exception for Black females (14-17 to 15-18) and one exception for White males (17-20 to 18-21).

From 18-21 to 20-23, the attrition rate increased substantially for Black females. For Black males, the attrition rate declined substantially, but then increased again. The white male attrition rate declined and then increased, but neither change was substantial. Finally, the attrition rate for white females remained relatively constant.

**Figure 4: Rolling Three-Year Average of Superintendents by Race (14-17 through 20-23)**

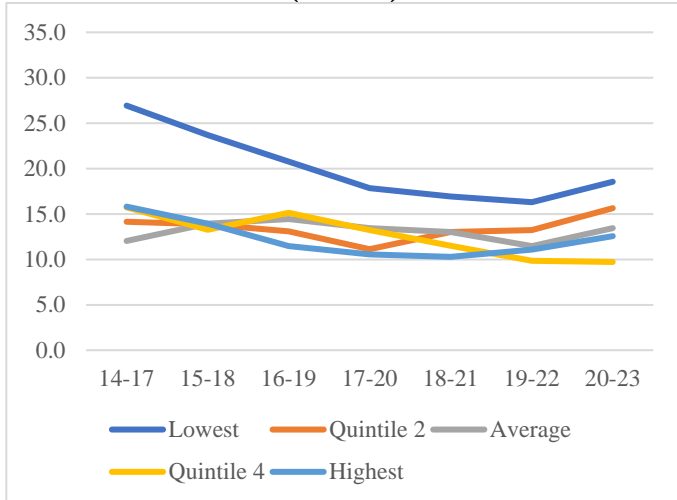


Data Source: PDE Educator Employment files; Authors' analysis

**Attrition by District Demographics**

**Figure 5** documents the superintendent attrition rate by the percentage of white students in the district. Districts were divided into five groups based on the percentage of white students enrolled in the district. This created five groups of districts with roughly equal numbers of districts in each of the five groups. The lowest quintile had the lowest percentage of white students and, thus, the greatest percentage of students of color. The lowest quintile--which includes districts with the greatest percentages of students of color--consistently exhibited higher attrition rates than other quintiles. From 17-20 to 19-22, the overall superintendent attrition rate decreased significantly, followed by an increase in 22-23. Quintile 2 is generally lower than the lowest quintile but higher than the average and other quintiles. For the other four quintiles of districts, there were fluctuations across time but a general decrease in the attrition rates until 19-22. After 19-22, the attrition rates increased for all quintiles except for quintile 4 which had a marginal decline in the attrition rate.

**Figure 5: Principal Attrition Rate by Quintiles of the Percent of White Students Enrolled in the District (2022-23)**



Data Source: PDE Educator Employment files; Authors' analysis

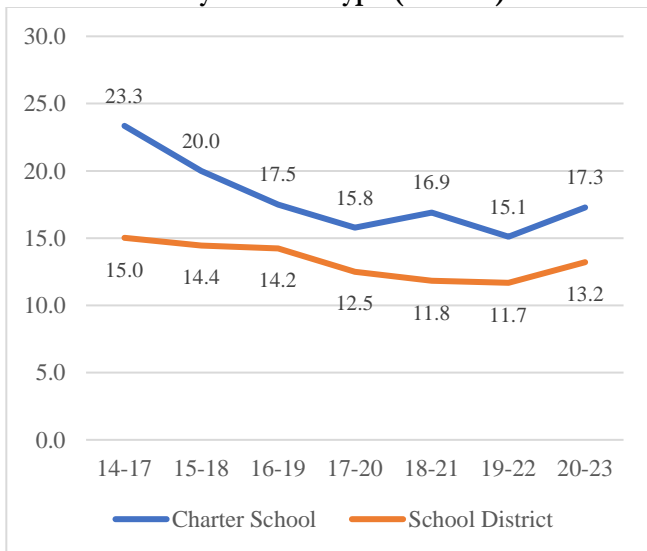
### Attrition by District Type

**Figure 6** documents the average superintendent attrition rates for charter schools and school districts. Across all years, the attrition rates for charter schools CEOs were higher than those for school district superintendents. The smallest difference between the two groups of superintendents was 3.3 percentage points.

For charter schools, the attrition rate gradually decreased from 23.3% in 14-17 to 15.8% in 17-19, then increased slightly to 16.9% in 18-21. This increase was followed by a decrease to 15.1% and then an increase to 17.3%.

School districts had a consistent decline in superintendent attrition rates, from 15.0% in 14-17 to 11.7% in 19-22. This was the lowest attrition rate across all years for either group. The attrition rate then increased to 13.2% for 22-23.

**Figure 6: Superintendent Attrition Rate by District Type (2022-23)**



Data Source: PDE Educator Employment files; Author's analysis

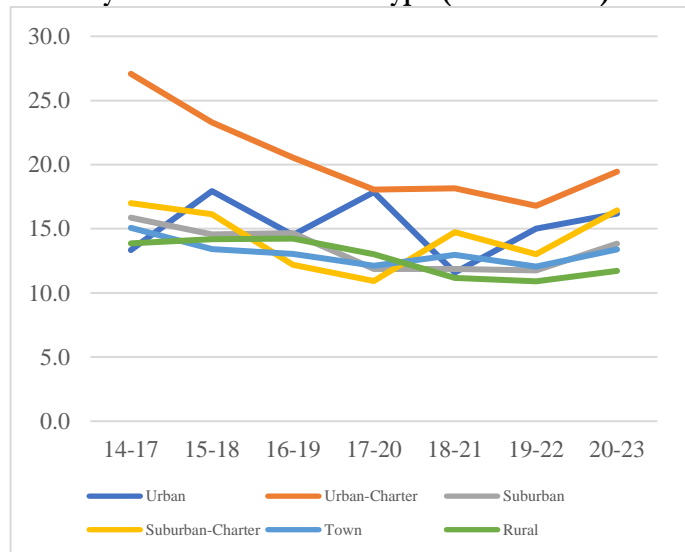
### Attrition by Locale and District Type

Superintendent attrition can also vary by the geographic locale of the school. The National Center for Education Statistics places districts in one of four geographic locales--urban, suburban, town, and rural. Because school type has such a profound influence on attrition rates, we present superintendent attrition rates by the intersection of locale and school type.

**Figure 7** shows the superintendent attrition rates categorized by both locale and district type. Among different locales, Urban-Charter districts consistently had the highest attrition rates. The Urban-Charter attrition rate started at 27.1% in 14-17 and declined steadily through 17-20. The rate then remained constant through 18-21 and then declined again to 19-22. The rate for 19-22 was 16.8% which was the lowest attrition rate across all years for charter CEOs in urban locales. The rate then increased to nearly 20% for 20-23.

Attrition rates for Urban districts were very unpredictable, peaking at 17.9% in 15-18 and then fluctuating across years. Both Suburban and Suburban-Charter districts had relatively lower attrition rates than Urban districts or urban Charters. Interestingly, Suburban-Charter schools had attrition rates that declined from 14-17 through 17-20 and then increased through 20-23. The attrition rates for both Town and Rural districts remained relatively stable, although Town districts had a slight increase in 20-23.

**Figure 7: Superintendent Attrition by Locale and District Type (2022 to 2023)**



Data Source: PDE Educator Employment files; Author's analysis

### Attrition by District Wealth

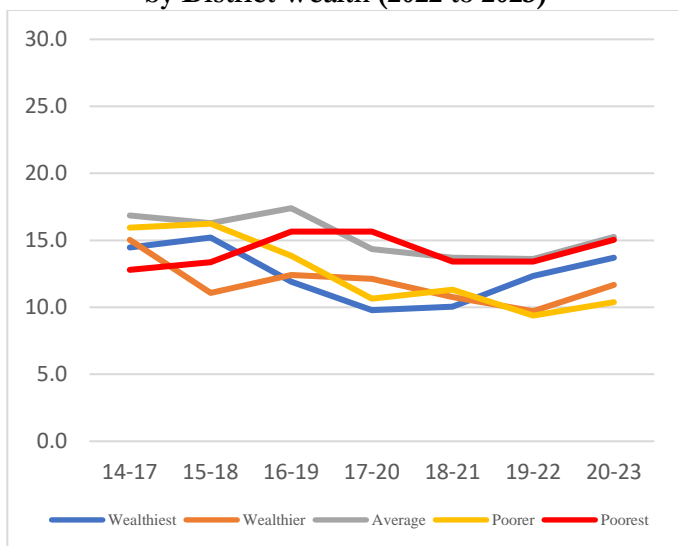
In this analysis, we compare superintendent attrition rates by district wealth which is based on the Market Value/Personal Income (MVPI) measure provided by PDE. I divided districts into five groups with approximately equal numbers of students. The first quintile

is designated as the “Wealthiest” districts and the fifth quintile is designated as the “Poorest” districts. This is a measure used in the school finance court case in Pennsylvania. Charter schools and CTCs are not included in the analysis as there is no MVPI measure for such schools.

As shown in **Figure 8**, there were few substantial differences in superintendent attrition rates by district wealth as measured by the MVPI. No one set of districts had consistently higher or lower attrition rates although Wealthy districts tended to have lower attrition rates while districts with Average wealth tended to have the highest attrition rates.

There was no relationship between district wealth and superintendent attrition. Factors other than district wealth are causing differences in superintendent attrition rates.

**Figure 8: Superintendent Attrition by District Wealth (2022 to 2023)**



Data Source: PDE Educator Employment files; Author’s analysis

### Conclusions

There was a substantial increase in superintendent attrition in Pennsylvania from 2014 to 2023. This increase will exacerbate the existing difficulties districts are encountering in finding enough individuals to fill vacant superintendent positions.

As with principals, superintendents of color had the highest attrition rates. These continued high attrition rates—coupled with lower numbers of individuals of color obtaining certification for all educator positions—will reduce the percentage of superintendents of color in Pennsylvania.

In terms of district type (Public School and Charter School), Charter schools tend to have extraordinarily high superintendent attrition rates and account for a disproportionate percentage of the superintendent attrition in Pennsylvania.

Urban districts—both charter schools and school districts—tended to have higher superintendent attrition rates than other locales.

The data suggests that there is only a weak relationship between district wealth and superintendent attrition. Further emphasized the influence of other factors on superintendent turnover. Rural districts tended to have lower attrition rates than districts in other locales.

### Reducing Superintendent Attrition

There is little evidence about the strategies to reduce superintendent attrition. As with any position, increasing the salary is the most consistent and effective strategy to reduce attrition.

Improving communication and relationships between the superintendent and board members as well as community members also reduces superintendent attrition. Finally, reducing political conflict and politically based attacks also reduces superintendent attrition. How to do this, however, is unclear given the current political environment.

In sum, districts should ensure they provide a competitive salary and adopt strategies to ensure effective communication between school board members and the superintendent as well as facilitate open communication between the school board, superintendent, and the broader community.

### Data and Methods

Different researchers can arrive at different superintendent attrition rates by using different groups of superintendents and different methods. Thus, it is important to document the data and methods used in making the calculations in this report.

In this study, we started our analysis by using all employed superintendents in the employment files located on the Pennsylvania Department of Education website. For the calculation of the overall attrition rate, we used all employed superintendents regardless of the employing organization. Attrition was calculated by identifying all individuals employed as a superintendent in a Pennsylvania public school district (including charter schools) and then determining if everyone was employed in the subsequent year in a Pennsylvania public school as a superintendent.

Superintendents/CEOs employed in multiple districts or charter schools were only counted once. So, for example, even though the CEO of Propel Charter Schools or Mastery Charter Schools are listed multiple times because of the number of schools in the charter management organizations. The attrition rate by district/charter school—which would include every district or charter school even if the listed superintendent or CEO appeared as a superintendent/CEO of other districts or charter schools—was more than 18%.

### **Suggested Citation**

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### **The Center for Evaluation and Education Policy Analysis**

This brief is part of the CEEPA Research and Policy Brief Series that provides evidence-based, peer-reviewed analysis of important educational issues in Pennsylvania and across the Commonwealth.

The *Pennsylvania Educator Diversity Consortium* is a grassroots organization of early childhood, PK-12, higher education, non-profit, community, and government leaders striving to increase the number of teachers of color, specifically those who identify as Black, Indigenous, and other People of Color, in Pennsylvania. PEDC's vision is of a future in which each learner in Pennsylvania experiences ethnically, racially, and linguistically diverse and culturally relevant and sustaining educators leading their classrooms and educational institutions.