

Chancellor's Honors Portfolio

**Revealing the Superintendency: Developing the National Longitudinal Superintendent
Database and Evaluating Trends in K-12 Superintendent Attrition**

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Introduction

District superintendents in the United States hold significant influence over public K-12 education, yet understanding of their labor market, diversity, and impacts of attrition remain limited. This gap in research has prevented the study of the effects of diverse superintendents on educational opportunities and outcomes, as well as the causes and consequences of superintendent attrition. Superintendents are the instructional, managerial, and political leaders of school districts, so understanding the who and why of the superintendency is critical to the future of K-12 education.¹

A major concern in the superintendency is attrition and its effects on the health of the district, teacher morale, and many other factors that can affect education quality for students. Superintendent stability is crucial for fostering inclusive and equitable education systems, as it allows leaders to understand local needs and build relationships within communities. Diversity among superintendents is essential for making policy decisions that reflect the experiences of marginalized students and conveying a welcoming environment for diverse leadership. Understanding the working conditions of superintendents is vital for supporting aspiring and current leaders and ensuring effective leadership strategies and workplace environments.

Mission of The Superintendent Lab

The Superintendent Lab, established by Dr. Rachel S. White, houses data, research, insights, and innovation in the realm of the superintendency. It operates under three guiding pillars:

Revealing: The lab endeavors to uncover insights into the superintendency by curating a comprehensive database of over 12,500 superintendents across the United States. Through rigorous data analysis, it aims to shed light on trends in the superintendent labor market,

¹ Johnson, S. M. (1996). *Leading to change: The challenge of the new superintendency*. Jossey-Bass.

fostering collaborations with researchers and affiliates to drive data-driven dialogue and advance equitable public school systems.

Humanizing: Recognizing the individuals behind the data, the lab conducts research that respects and reflects the personal and professional experiences of superintendents. While leveraging innovative technologies such as artificial intelligence and web scraping, it emphasizes the importance of narratives alongside numbers, seeking to engage with data in a manner that acknowledges the human aspect of the superintendency.

Training: The lab is committed to providing students with valuable research experiences, offering opportunities to work with big datasets and analyze both quantitative and qualitative data. By fostering collaborative dialogue among students and researchers passionate about policy and leadership, the lab aims to identify strategies for creating more inclusive and equitable K-12 education systems.

My Role in the Lab

I became a part of The Superintendent Lab's team in the summer of 2023 as an undergraduate research assistant. My first major project was data collection and cleaning for the Lab's sub-dataset on superintendent attrition and mobility, informally titled the "Exits, Entrants, and Movers" dataset. This introduced me to the Lab's research methods and values, which I applied to my second project: data collection and cleaning for the National Longitudinal Superintendent Database (NLSD) yearly update. Once data collection and cleaning for the yearly update was complete, I moved to analysis and application of the data for dissemination to interested parties. The Superintendent Lab seeks to publicize information gleaned from the NLSD, which provided me with experience in creation of infographics, short briefs, and larger works. I decided to utilize the NLSD to create infographics and briefs at an individual state level

of analysis, starting with states that had been requested by interested parties, such as superintendent associations and district professionals. These state-level briefs are featured in this portfolio. I also collaborated with other team members on different briefs and other works stemming from the NLSD and Movers dataset.

Terminology

Superintendent The chief administrator of a school district. May also be referred to as *district administrator* or *director of schools*.

Interim Superintendent A superintendent appointed on a temporary basis while a search for a permanent candidate is conducted.

School District Any traditional, K-12 public school district. State technical schools, schools for the deaf and blind, and charter schools are excluded due to their differing leadership mechanisms and structure.

Turnover Event A superintendent departure from employment in a particular district.

Superintendent Association An association by state, nationally, by affinity composed of superintendents. i.e. Tennessee Organization of School Superintendents, New Jersey Alliance of Black Superintendents.

National Center for Education Statistics (NCES) An organization under the United States Department of Education that collects, analyzes, and publishes statistics on education and public school district finance information.

The National Longitudinal Superintendent Database

Purpose

Prior research on the superintendency is flawed because of its reliance on surveys and limited state-published databases. Surveys of superintendents are characterized by issues such as low response rates and questions asking the respondent about future plans.^{2 3} This is only marginally helpful information for decoding the superintendent labor market. Surveys also lack the longitudinal aspect needed to understand fluctuations in the labor market and details of superintendent mobility. Further, state-published databases are often unreliable because they are not up-to-date or easy to navigate. Relying on this data to draw significant conclusions is difficult because the databases lack information about superintendent attrition, gender, race, and other factors. Presently, only 25 states have a superintendent database that is both up-to-date and user-friendly. Recognizing these issues, the founder of The Superintendent Lab created the National Longitudinal Superintendent Database (NLSD).

Table 1

Superintendent data availability⁴

	proportion of states	proportion of supts
Publicly available superintendent names available, appear up to date (data verification for random selection of entries)	50.0%	46.4%
Online directory of superintendent names, appear up to date, complex (e.g., online directory lists districts so must click to find superintendent information, data only available in PDF)	20.0%	22.4%
Online directory of superintendent names, not up to date (collect data by going to every district website)	22.0%	25.9%
No online directory of superintendent names (collect data by going to every district website)	8.0%	5.3%

² Schwartz, H.L., & Diliberti, M.K. (2022). *State of the superintendent: High job satisfaction and a projected normal turnover rate*. RAND Corporation.

³ Thomas, T., Tienken, C.H., Kang, L., Bennett, N., Cronin, S., & Torrento, J. (2023). *2022-23 AASA superintendent salary and benefits study*. AASA: The School Superintendents Association.

⁴ White et al. (under review)

Methodology

To create the NLSD, the founder of The Superintendent Lab followed a systematic approach to gather data on traditional K-12 public school districts and their superintendents. First, a comprehensive list of these districts across the United States was compiled using information sourced from the U.S. Department of Education's Common Core of Data. Subsequently, the availability of superintendent information was assessed by exploring state databases and superintendent associations, aiming to understand the scope of publicly-available data. The gender of each superintendent was then determined through a multi-step process. Initially, gender data was sought from publicly-available sources where superintendents had self-identified. In cases where such data was not available, gender attribution was performed based on publicly stated pronouns found on school district websites or in news articles. Additionally, the Social Security Administration's name-gender database was consulted for further validation. It is noteworthy that instances where gender could not be discerned constituted a negligible proportion (less than 0.01%) of the superintendent dataset and were coded as missing. This methodological framework ensured a thorough and rigorous approach to dataset creation and expansion.

Data Collection

Data is collected annually using web searches to determine information about turnover events and confirm the identity of the current superintendent. If a turnover event occurs, research team members consult news reports, school board minutes, district press releases, social media, and other public sources to determine the nature of turnover. Many codes are not mutually exclusive. i.e. a resignation may also be coded as involuntary.

Table 2
Turnover codes

Code	Definition of code
Interim	Supt. was in an interim or “acting” role
Voluntary	Departed from district under ostensibly amicable circumstances
Involuntary/Contentious	Departed from district involuntarily or in a contentious environment
Resigned	Departure reported as a resignation
Retired	Departure reported as a retirement
Fired	Supt. was terminated by board
Death	Supt. died while in office
Arrested	Supt. arrested while in office
Moved up	Supt. moved to a higher role in K-12 leadership, such as a regional supt. or state commissioner of education
Moved down	Supt. moved to a lower level of administration or returned to classroom teaching

Table 3
Samples of coding for type and nature of superintendent attrition event⁵

Research team compiled quotes from publicly available sources	Codes applied
"The time was to take on a bigger challenge and I also grew up in [X] County and so this was an opportunity to come back close to home and make a difference here"	resignation, ostensibly amicable
"[Name] celebrated his last day with the [X] school district on [date] after serving more than seven years as superintendent. [...] In recent years, it became clear that the relationship between [Name] and the board was souring and the election of four new board members who ran on platforms of changing the district, specifically on addressing racial inequity, likely would have strained that dynamic further."	retirement, political context/contentious environment
"The stress of trying to handle the unprecedented Covid-19 pandemic compounded by divisive politics on full display at hostile school board meetings was too much." [Name] said "Some of my board members did not agree with my principal assignments. Based on my beliefs, my vision for [district] and our Board's vision is different. I was given the choice of changing the list of administrators or termination of my duties"	resignation, political context/contentious environment
"A settlement involving the [X] School District and the former superintendent has been reached. The agreement provides that former Superintendent, whose contract was terminated in February [...] certain differences have arisen between the employees of the district regarding the administration and operation of the district."	fired/non-renewed, political context/contentious environment
"[Name] was accused of trying to steal more than \$300 in items from [Store], according to court documents."	arrested/convicted, fired/non-renewed, political context/contentious environment
"[New supt name] replaces [prior supt name], who resigned earlier this school year to take a position with the [State] Department of Education"	resigned, ostensibly amicable, moved up
"[Name] has stepped down from the [superintendent] position. [...] [Name] has accepted a job as a special education teacher at South Central Middle School. [Name] says it was a hard decision to leave and she leaves with a multitude of memories and will miss those in the [District] community. "	resigned, ostensibly amicable, moved down
The end of the school year also means the end of [Name] tenure as [superintendent] of [District]. [Name] however, won't be leaving town, as he announced on Friday that he is heading to [X] Community College, where he will serve as its Senior Vice President for Student Development and the Educational Pipeline. [Name], who has served as [District superintendent] since 2011, first announced his plans to step down from the role last September.	resigned, ostensibly amicable, moved out

⁵ White et al. (under review)

Applications

A primary use of the NLSD is to analyze the nature of superintendent attrition at the national, regional, state, and district levels. Public schools are increasingly the battleground where local, state, and national political issues come to a head, often resulting in chaotic school board meetings and community protests.⁶ The NLSD can be used to evaluate the relationship between politics and superintendent turnover that could have a trickle-down effect on students and teachers. Second, the NLSD is a reliable source of gender data on superintendents, so it can be used to look at trends in employment, turnover, and mobility for each gender. Currently, women outnumber men at every level of K-12 education except the superintendency, and little research has been conducted to explore avenues for narrowing this gender gap for women in leadership.⁷ Finally, the NLSD creates a breakthrough opportunity to look at the superintendent job market across states and evaluate the pathways superintendents may take to move across state boundaries. This also affords us an opportunity to see who moves across state lines based on demographic characteristics and why the move occurred. Since 2019, 272 unique superintendents have moved across state lines. Between 2020-21 and 2023-24, cross-state mobility accounted for between 3.4% and 3.9% of all superintendent attrition.⁸

Challenges

The Superintendent Lab prioritizes honesty and transparency in analysis and publication of data. The proprietary NLSD and unique nature of the superintendency poses a few challenges to complete accuracy in data collection. Currently, state-level datasets vary in their approach to collecting demographic data, often masking important information by merging categories or omitting crucial identity characteristics like gender identity and sexual orientation, hindering

⁶ White, R. S., Evans, M. P., & Malin, J. R. (2023). Political battles in suburbia. *Phi Delta Kappan*, 104(5), -610.

⁷ White, R. S. (2023). Ceilings made of glass and leaving en masse? Examining superintendent gender gaps and turnover over time across the United States. *Educational Researcher*, 1-4.

⁸ *The National Longitudinal Superintendent Database*.

efforts to understand inequities among marginalized groups in accessing superintendent positions. Differences in this reporting of demographic data sometimes makes it difficult to standardize data in the NLSD.

Race and ethnicity are a large and necessary part of understanding the superintendency and encouraging diversity, but self-identified race and ethnicity data is rarely available publicly and consistently. Attempts to ascribe this data from photographs and names are often inaccurate and highly problematic. Because of own-race bias (ORB), a phenomenon in which individuals recognize and remember others of their own race more accurately than members of other races, research team members have not ascribed race and ethnicity data.⁹ Instead, the team relies on data as it becomes available from state education agencies (for less than 10% of U.S. states), state and national racial/ethnic affinity groups (e.g., National Association of Black School Educators), and news articles (e.g., a news article highlighting a superintendent as being the first Black female superintendent in the district).

Superintendents are a highly mobile group, which makes them difficult to track. In order to track superintendents across state borders, a unique ID system based on their first and last names has been developed within the NLSD. However, challenges have arisen due to the presence of multiple superintendents with identical names and variations in reported names over time. For instance, a superintendent named Allen James White may be reported in one district as Allen White and reported in another as A.J. White. Alternatively, a superintendent's last name may change or become hyphenated. These issues are mitigated through manual review processes, meticulous data collection, and extensive data cleaning procedures, though some challenges persist, particularly when superintendents change names upon moving districts.

⁹ Wong, H. K., Stephen, I. D., & Keeble, D. R. T. (2020). The Own-Race Bias for Face Recognition in a Multiracial Society. *Frontiers in psychology*, 11, 208. <https://doi.org/10.3389/fpsyg.2020.00208>

During the 2023 round of data collection, approximately 570 districts were designated as “No Data Districts,” districts where information on superintendent attrition could not be found. An analysis of these districts by a TSL team member found that, compared to urban and suburban districts, rural school districts were significantly more likely to have had no online, publicly available information related to a superintendent attrition event. Rural-Remote districts accounted for 40.28% of No Data districts, while they account for 16.62% of school districts overall. Similarly, Rural-Distant districts accounted for 33.26% of No Data districts, while they account for 22.80% of all school districts.¹⁰ This causes a disparity within the NLSD in regard to reporting of data on rural districts.

Avenues for Development

We propose the establishment of a center for superintendent research funded by the federal government, combining government resources with independent research methods. This center would focus on creating and maintaining a national longitudinal database, ensuring accurate data collection over an extended period. By utilizing web scraping and regular fact-checking through various sources, the center would provide up-to-date and reliable insights into superintendent characteristics, turnover trends, and hiring processes, potentially uncovering significant longitudinal trends as the dataset ages.

We also recommend mandating states to maintain an up-to-date superintendent list to streamline data collection for researchers. While some states already have such datasets, ensuring their accuracy is challenging and time-consuming due to the need for individual fact-checking. To address this, federally mandated state reports could be implemented, enhancing data validity and transparency. Regular data cleaning and timestamping are suggested to maintain accuracy,

¹⁰ Bengyak, E., & White, R.S. (2024). "Data Availability and Transparency around Superintendent Attrition." The Superintendent Lab.

although complete precision may be challenging given the fluctuating nature of superintendent turnover. Nonetheless, this approach could still significantly improve the reliability of statewide and nationwide superintendent studies.

Exits, Entrants, and Movers Sub-Dataset

Purpose

In the summer of 2023, the founder of The Superintendent Lab constructed a refined dataset focused on superintendent attrition and mobility within traditional K-12 public school districts in the United States. This involved filtering the NLSD to create a dataset specifically comprising superintendents who had entered, exited, taken gap years, or relocated since the NLSD's creation in 2019. The resulting dataset is structured with each row representing a unique superintendent identified by a distinct ID, and includes various columns such as NCES (National Center for Education Statistics) identification numbers for each year, district names for each year, indicators for superintendent exits, moves, gap years, cross-state moves, and specific details regarding the nature and circumstances of exits or moves.

Methodology

The methodology adopted for dataset creation involved a meticulous process aimed at ensuring data accuracy and relevance. Initial steps included filtering the NLSD to isolate superintendents who moved within or out of the profession since 2019. Subsequently, a dataset was constructed with pertinent columns capturing key indicators related to superintendent exits, moves, and associated circumstances. A proactive approach was taken to address potential data inconsistencies, including the merging of duplicate entries and the removal of redundant rows. Furthermore, coding guidelines from the NLSD data collection procedures were adhered to for accurately categorizing various types and natures of exits or moves, utilizing a combination of publicly available information and detailed notes for reference. In cases where uncertainty arose or data was unavailable, protocols were established for further investigation or documentation.

Challenges

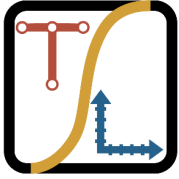
Throughout the dataset creation process, several challenges were repeated from the NLSD, primarily stemming from the complexity and variability inherent in superintendent turnover. Addressing duplicates and ensuring data integrity required meticulous attention to detail, especially when reconciling variations in superintendent names. Additionally, accurately coding the nature of exits or moves posed challenges, particularly in cases where limited information was available or where interpretations were subjective. To mitigate these challenges, comprehensive guidelines were established for coding decisions, with provisions for collaboration and secondary coding in cases of uncertainty. Despite these challenges, the methodology employed aimed to uphold the integrity and reliability of the dataset.

Applications

One notable application of the Movers dataset is to enhance strategic decision-making processes for school districts and policymakers. Interested parties can leverage information gleaned from the dataset to analyze trends in superintendent exits, moves, and gap years, thereby informing succession planning and recruitment strategies. Moreover, policymakers and researchers can utilize the dataset to conduct comprehensive studies on factors contributing to superintendent turnover and its consequences for school performance and community engagement. Additionally, the dataset adds to the longitudinal aspect of the NLSD by tracking superintendent career trajectories and examining patterns of mobility across different regions and demographic profiles.

References

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THE SUPERINTENDENT LAB

Research Brief

Superintendent Attrition Trends in Arizona

By Sarah A. Harper, Research Assistant, The Superintendent Lab and MPA Candidate, The University of Tennessee Knoxville;

Dr. Rachel S. White, Founder, The Superintendent Lab and Asst. Professor, The University of Tennessee Knoxville

Introduction

Through the potential impacts on district stability, morale, and leadership continuity, superintendent attrition can have implications for students, teachers, and communities. In Arizona, between 2019 and 2023, 42.4% of districts experienced at least one superintendent departure. This rate is on-par with the national rate of 41.3%. Superintendents play a pivotal role in shaping the direction, policies, and academic outcomes of school districts. This brief seeks to analyze attrition trends in the state and draw comparisons between national and state-level superintendent attrition patterns.

Data & Methods

This analysis utilizes data sourced from the National Longitudinal Superintendent Database (NLSD) (White, 2023), which includes demographics of superintendents and details of attrition circumstances within traditional K-12 public school districts in the United States (n~12,500 annually). Within the NLSD, every district is categorized as a rural, town, suburban, or city based on the U.S. Department of Education Common Core of Data (CCD) (2018) classification. The NLSD also includes data on each

district's student demographics and enrollment based on CCD data as well as Small Area Income Poverty Estimates (SAIPE), which is a measure of student poverty. SAIPE estimates have been found to be more reliable than using the proportion of students receiving free and reduced price lunch status, which serves as a proxy measure for the percentage of students living in poverty at best and often overestimates poverty rates. Using this student demographic data, student demographic quartile ranges are generated at the national level.

The NLSD also houses details about the nature and type of attrition. In particular, The Superintendent Lab research team engages in extensive culling of online news and engages in textual and sentiment analyses to gain deeper insights into the nature of the attrition event by coding attrition events for attrition type (e.g., retirement, resignation, fired/non-renewed), as well as the nature of the attrition (e.g., ostensibly amicable attrition or attrition taking place in a contentious environment or politicized context). For the purposes of this brief, we will focus on describing overall attrition trends, as well as attrition type.

Attrition Trends in Arizona

Locale Superintendent attrition has increased in rural, suburban and city districts since the 2019-20 school year. Notably, superintendent attrition in city districts has maintained a rate of 30% after the 2021-22 and 2022-23 school years.



Attrition rates in town districts are trending lower, with the 2023 rate lower (10.64%) than the prior three years. Arizona is following national trends, which see increasing rates across all locales.

District Demographics Demographics are analyzed based on quartiles of child poverty and race. In Arizona, there is no statistically significant difference found in superintendent attrition when districts are analyzed based on child poverty, percent Black students, or percent Hispanic students. However, districts in the lower quartiles of child poverty (fewer occurrences) had higher attrition rates, which defies national trends and trends from other states.

Gender Gender gaps remain at both the national & state level. In order to close gender gaps, women need to replace men superintendents at a higher rate. This emphasizes the importance of examining attrition by gender. At present, 61% of Arizona superintendents are men, while the remaining 39% are women. The percentage of women superintendents in Arizona is above the national average (28.6%). At first glance, Arizona seems to be a favorable environment for women superintendents, but a deeper analysis of turnover events shows otherwise. When superintendents turnover, men superintendents are replacing women at a higher rate (28.5%) than women are replacing men (24.3%). This is leading to a steady decline in the number of women superintendents. Since the 2019-20 school year, womens' participation in the superintendency has declined 3.4 percentage points. Womens' representation in superintendencies is most rapidly

declining in suburban districts (-19.1 percentage points.)

Interim Turnover Interim superintendents or acting superintendents are difficult to classify correctly due to their often short tenure and inconsistencies in media coverage and district reporting of their status. The Superintendent Lab aims to capture and classify as many interims as possible; however, because we collect our data by hand during particular times of the year, we likely underestimate the number of interim superintendents. In Arizona, no data was available at the time of collection to classify any superintendent as interim for the 2022-2023 school year.

Nature of Attrition in Arizona

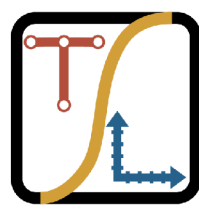
Between the 2022-23 and 2023-24 school years, 47% of superintendent attrition events were portrayed in the media and news as voluntary (e.g., planned interim departures, retirements, or relocations to other districts or professions). 14% were publicly described as taking place in a contentious environment or politicized context. For example, a number of attrition events were described publicly in conjunction with budget mismanagement and disagreements with the school board. The remaining 38% lacked available data to ascribe the nature of the departure. This is a far higher proportion of missing data than is found nationally or in most other states.

Conclusion

The analysis of superintendent attrition in Arizona reveals concerning trends, particularly for women superintendents. Turnover rates for both men and women are increasing, but women are losing ground to



men, especially in certain locales. This presents an opportunity for interested parties and school boards to support womens' participation in the superintendency and ensure that the profession is open to all. Further, the high proportion of unavailable information on the nature of superintendent turnover signals a concerning lack of transparency from those involved in the superintendency on a local level.



THE SUPERINTENDENT LAB

presents

Arizona Superintendent Attrition

By: Sarah A. Harper, Research Assistant, The Superintendent Lab; MPA Candidate, University of Tennessee

Between 2019-20 and 2023-24



42.4%

of districts experienced
1 superintendent
departure



10.2%

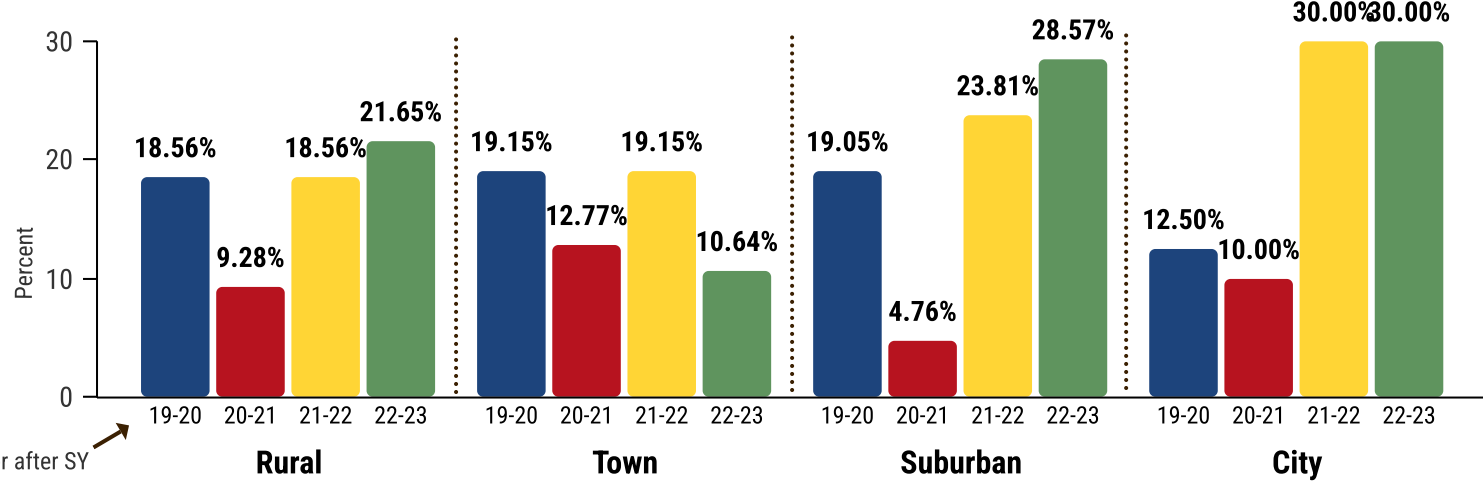
of districts experienced
2 superintendent
departures



1%

of districts experienced
3+ superintendent
departures

Superintendent Attrition by Locale & Year

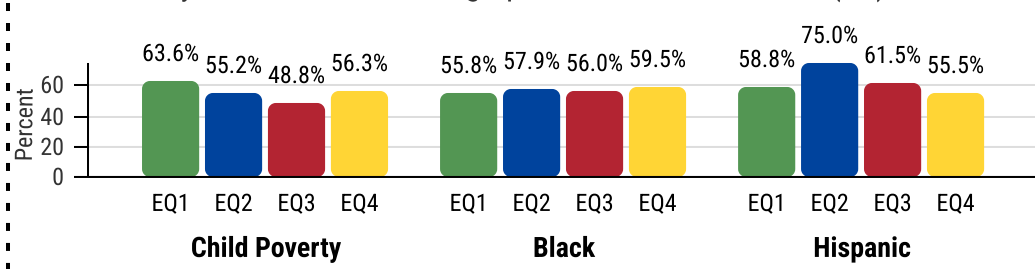


Arizona superintendent attrition is highly unpredictable.

Attrition in all locales is fluxing erratically. Rural and town attrition rates vary, but are holding under 22% after the past four school years. Suburban and city district attrition varied dramatically, but held at high rates after the past two school years.

Superintendent Attrition by District Demographics

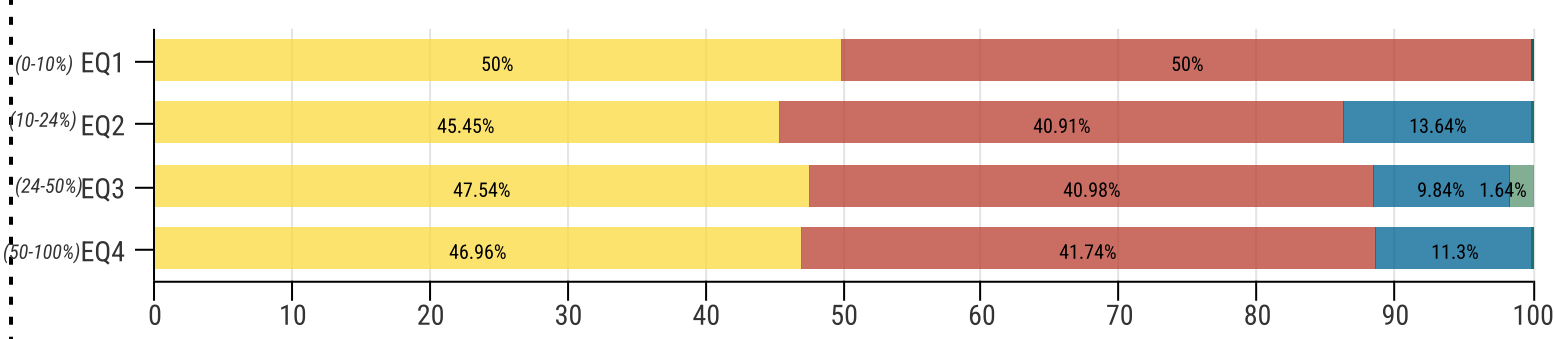
Percent of Districts that Experienced at Least One Superintendent Departure, by Select Student Demographic Enrollment Quartiles (EQ)



No statistically significant differences in superintendent departure based on % Child Poverty, % Black, or % Hispanic.

Percent of Districts that Experienced 0 to 4 Superintendent Departures, by Percent Students of Color Enrollment Quartile (EQ)

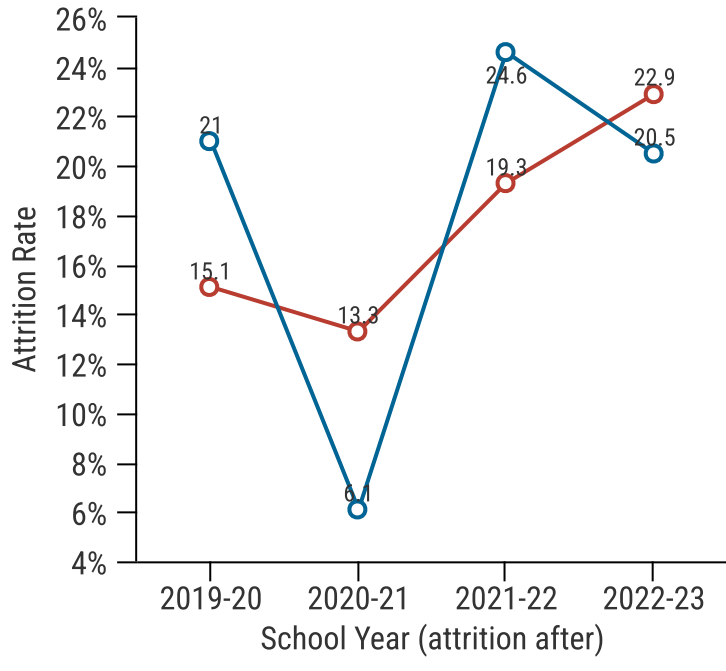
Legend: No departures (Yellow), One departure (Red), Two departures (Blue), Three or more departures (Green)



Districts with larger proportions of students of color are significantly more likely to have experienced multiple turnover events since 2019-20.

State and federal policymakers need to consider the ways in which enduring financial inequities and underfunding of districts serving higher concentrations of students of color influence district resources and working conditions, and if and how this may contribute to undesirable superintendent churn.

Superintendent Attrition Rates, by Gender & Year



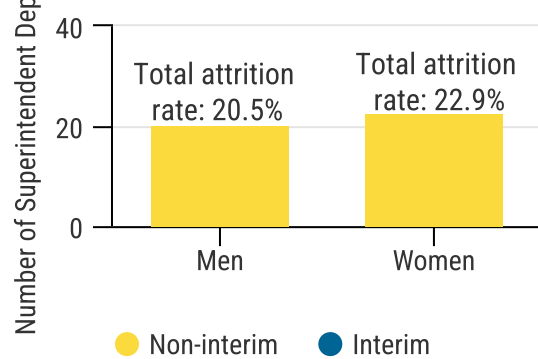
During the COVID-19 pandemic, the attrition rate for both genders dramatically decreased. Women's attrition rate is steadily trending upward, while men's erratically jumps.

Both genders' attrition rates spiked to over 20% this past year.

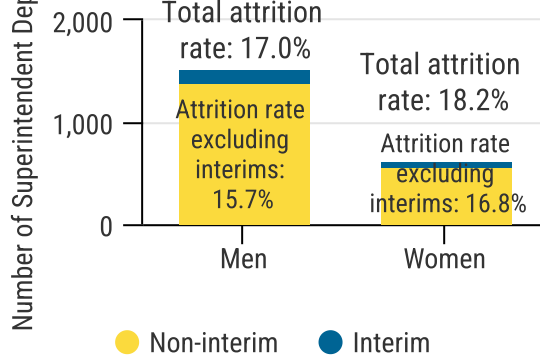
Concerted efforts by school boards, superintendent support organizations, researchers, and policymakers are needed to better understand the contributors to and consequences of increasing attrition rates.

What are the necessary steps to create supportive work environments for all superintendents?

Attrition Attributable to Permanent vs. Interim Positions in AZ

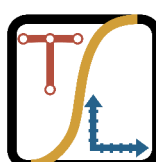


Attrition Attributable to Permanent vs. Interim Positions Nationwide



Nationwide, women are significantly more likely to serve as interims and turn over at a higher rate than men.

At the end of the 2022-23 school year, Arizona had no turnover attributed to interim superintendents.

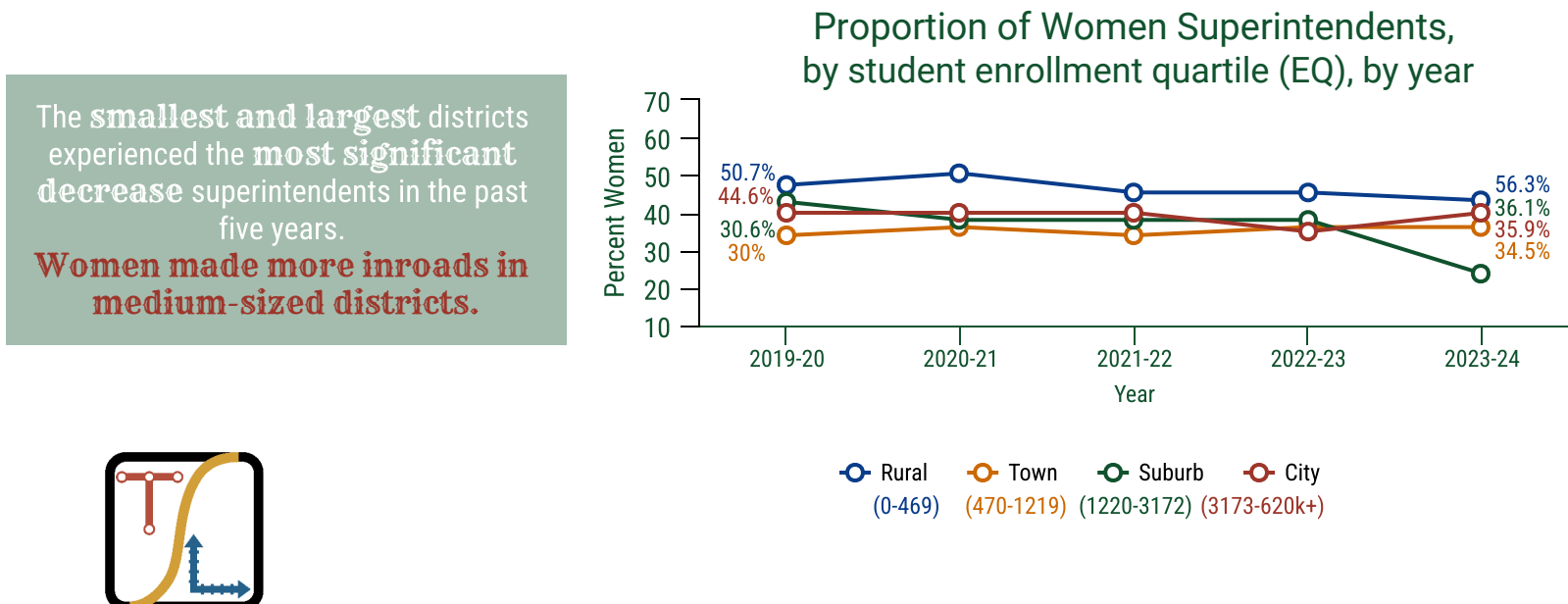
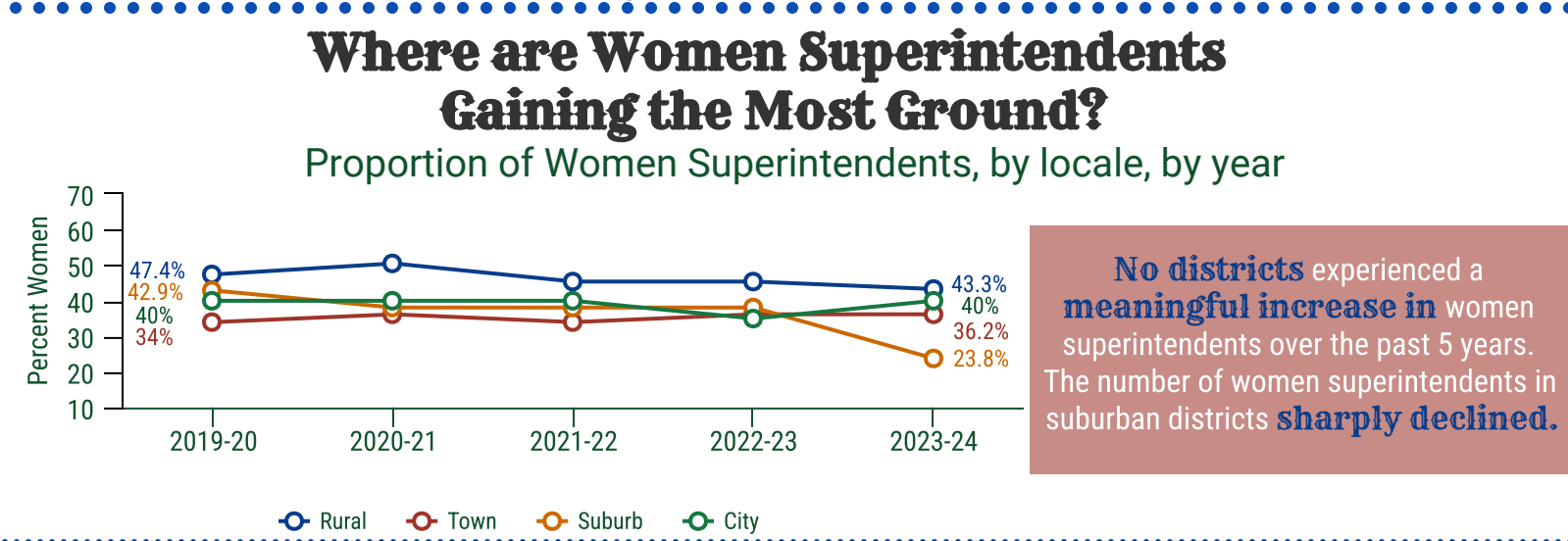
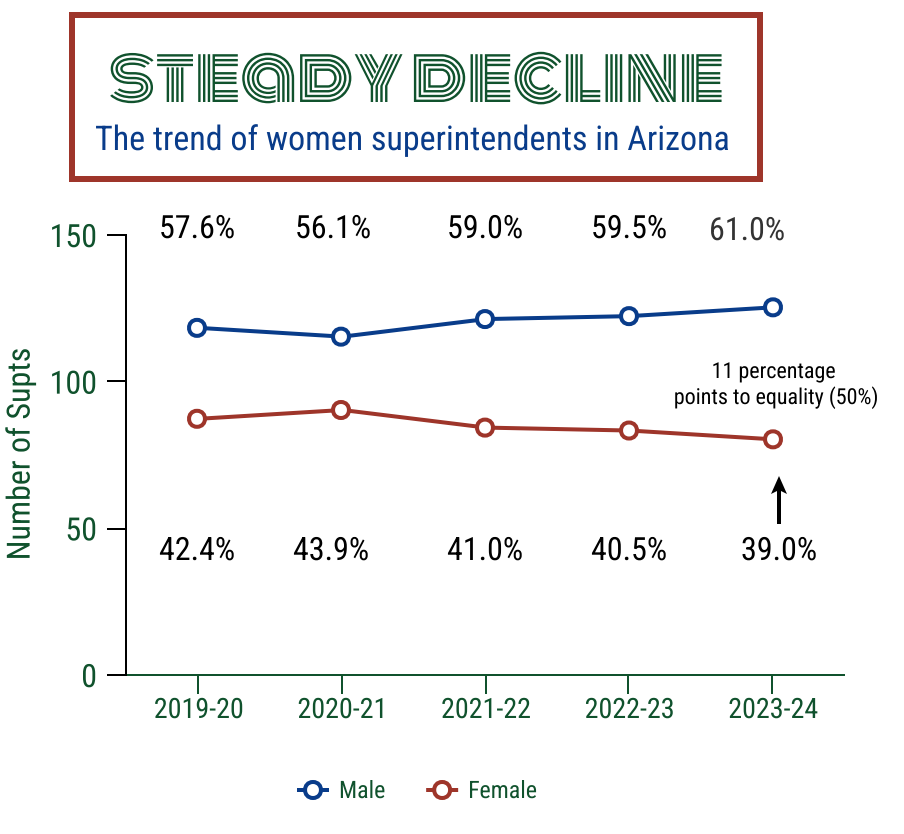
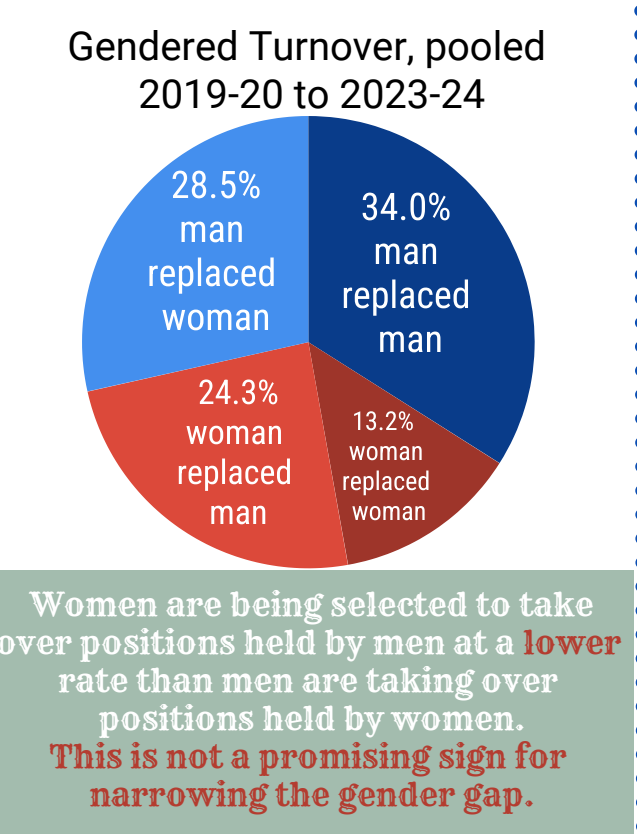
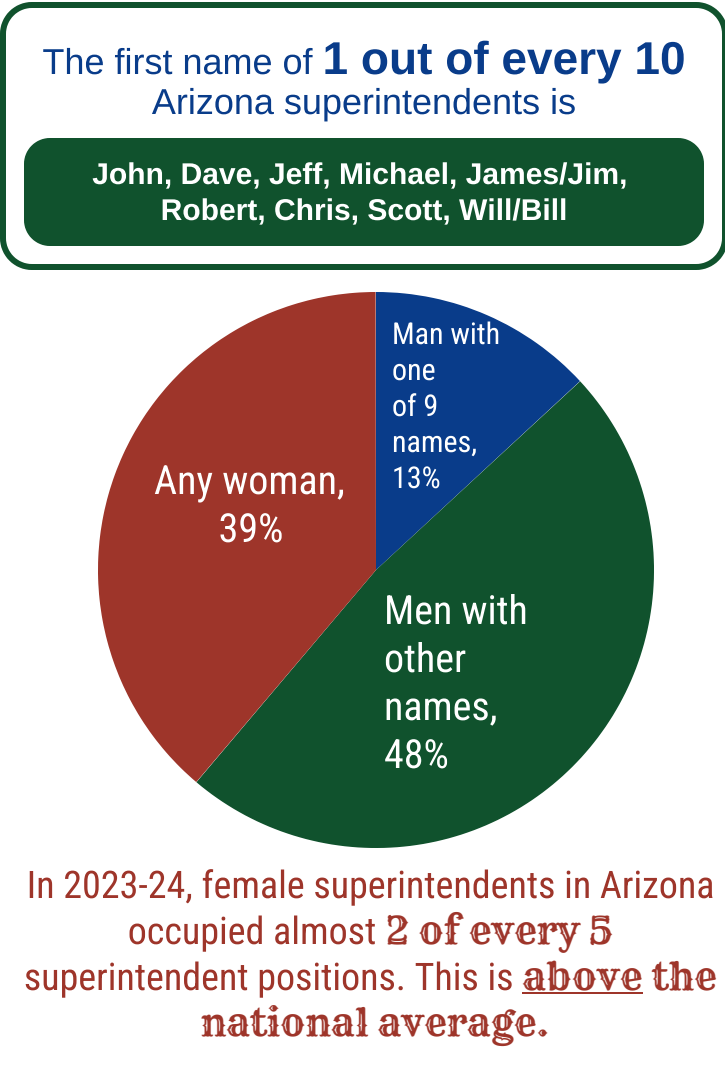
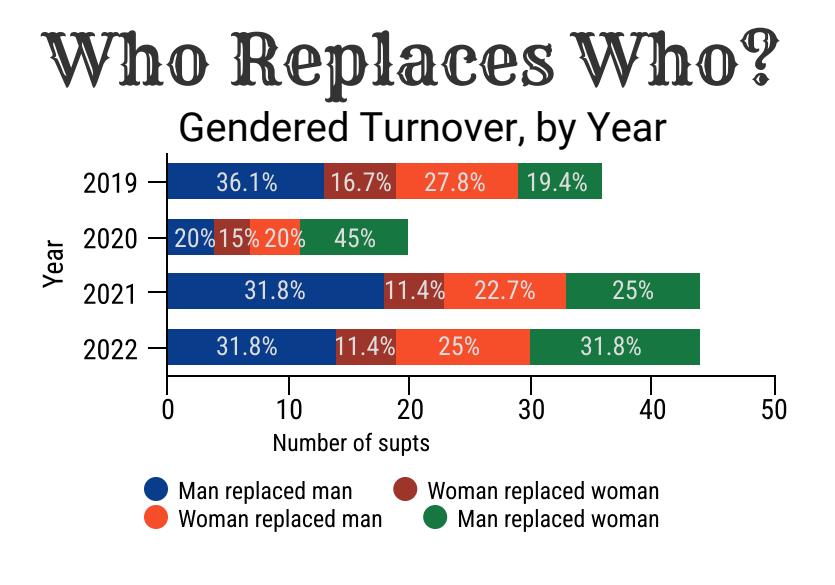


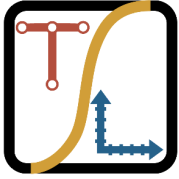
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Gender and the Arizona Superintendency

2019-20 to 2023-24

By: Sarah A. Harper
Research Assistant, The Superintendent Lab; MPA Candidate, University of Tennessee





THE SUPERINTENDENT LAB

Research Brief

Superintendent Attrition Trends in Massachusetts

By Sarah A. Harper, Research Assistant, The Superintendent Lab and MPA Candidate, The University of Tennessee Knoxville;

Dr. Rachel S. White, Founder, The Superintendent Lab and Asst. Professor, The University of Tennessee Knoxville

Introduction

Through the potential impacts on district stability, morale, and leadership continuity, superintendent attrition can have implications for students, teachers, and communities. In Massachusetts, between 2019 and 2023, 42.7% of districts experienced at least one superintendent departure. This rate is on-par with the national rate of 41.3%. Superintendents play a pivotal role in shaping the direction, policies, and academic outcomes of school districts. This brief seeks to analyze attrition trends in the state and draw comparisons between national and state-level superintendent attrition patterns.

Data & Methods

This analysis utilizes data sourced from the National Longitudinal Superintendent Database (NLSD) (White, 2023), which includes demographics of superintendents and details of attrition circumstances within traditional K-12 public school districts in the United States (n~12,500 annually). Within the NLSD, every district is categorized as a rural, town, suburban, or city based on the U.S. Department of Education Common Core of Data (CCD) (2018) classification. The NLSD also includes data on each

district's student demographics and enrollment based on CCD data as well as Small Area Income Poverty Estimates (SAIPE), which is a measure of student poverty. SAIPE estimates have been found to be more reliable than using the proportion of students receiving free and reduced price lunch status, which serves as a proxy measure for the percentage of students living in poverty at best and often overestimates poverty rates. Using this student demographic data, student demographic quartile ranges are generated at the national level.

The NLSD also houses details about the nature and type of attrition. In particular, The Superintendent Lab research team engages in extensive culling of online news and engages in textual and sentiment analyses to gain deeper insights into the nature of the attrition event by coding attrition events for attrition type (e.g., retirement, resignation, fired/non-renewed), as well as the nature of the attrition (e.g., ostensibly amicable attrition or attrition taking place in a contentious environment or politicized context). For the purposes of this brief, we will focus on describing overall attrition trends, as well as attrition type.

Attrition Trends in Massachusetts

Locale Superintendent attrition has declined in rural and town districts since the 2019-20 school year. Notably, superintendent attrition in town districts decreased from 40% after 2019-20 to 10% after 2022-23. Attrition rates in suburban



and city districts are more variable, with 2023 attrition rates matching or exceeding those in 2020, despite decreases in 2021 and 2022. Massachusetts is defying national trends, which see increased rates across all locales since 2019-20.

District Demographics Demographics are analyzed based on quartiles of child poverty and race. In Massachusetts, low sample sizes in some student poverty and race quartiles inhibit our ability to examine if there are statistically significant differences in superintendent attrition rates based on student demographics. However, in Q1 of child poverty (districts with few children living in poverty), superintendent attrition substantially lower (53.8%) than Q4, where attrition is 71.4%. When examining attrition across districts based on student racial demographics, we find that a similar trend emerges based on the proportion of Hispanic students a district is serving: While superintendent attrition in districts serving few Hispanic students (Q1) is at 45%, two out of every three districts (66.7%) identified as Q4 (serving the largest population of Hispanic students) (Q4) experiences superintendent attrition. At the national level, we see a statistically significant link between the percentage of Black students and increased turnover, which is not present in Massachusetts.

Gender

Gender gaps remain at both the national & state level. In order to close gender gaps, women need to replace men superintendents at a higher rate. This emphasizes the importance of examining attrition by gender. At present, 57.1% of Massachusetts superintendents are men,

while the remaining 42.9% are female. The state stands out as a particularly favorable environment for female superintendents. The percentage of female superintendents in Massachusetts is above the national average (28.6%). When superintendents turnover, women are replacing male superintendents at a higher rate (24.4%) than men are replacing female superintendents (22.2%). This is a promising sign for further narrowing the gender gap in the superintendency. At the current rate of growth, women could comprise 50% of Massachusetts superintendents as soon as 2034. Women's representation in superintendencies is most rapidly increasing in the smallest districts. For example, in districts with fewer than 469 students (Q1 enrollment), women's participation in the superintendency jumped from 33.3% to 56.3% in just 5 years – a promising 23 percentage point gain.

Interim Turnover Interim superintendents or acting superintendents are difficult to classify correctly due to their often short tenure and inconsistencies in media coverage and district reporting of their status. The Superintendent Lab aims to capture and classify as many interims as possible; however, because we collect our data by hand during particular times of the year, we likely underestimate the number of interim superintendents. Nonetheless, it is important to note that attrition rates for both men and women are lower when interims are excluded from the count. The attrition rate for women dropped 4.1% when interims were excluded, while the attrition rate for men dropped only 1.3%. This supports the finding that women are more likely to serve



as interim superintendents than men. This follows the national trend.

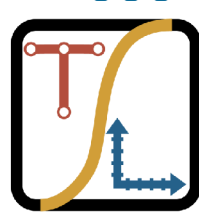
Nature of Attrition in Massachusetts

Between the 2022-23 and 2023-24 school years, 82% of superintendent attrition events were portrayed in the media and news as voluntary (e.g., planned interim departures, retirements, or relocations to other districts or professions). The remaining 18% were publicly described as taking place in a contentious environment or politicized context. For example, a number of attrition events were described publicly in conjunction with purported budget mismanagement and/or socio-political issues such as LGBTQIA+ stances and racial controversies.

Conclusion

The analysis of superintendent attrition in Massachusetts reveals both promising developments and concerning trends, particularly for districts serving greater proportions of children living in poverty and Hispanic students that are experiencing higher attrition rates. The high turnover rates experienced after the 2019-2020 school year may speak to instability and challenges faced by districts in maintaining consistent leadership during the COVID-19 pandemic. However, the superintendency in Massachusetts appears to be moving in a healthy, positive direction, particularly in the increasing representation of women in the superintendency. Despite the complex nature of turnover events, which often involve voluntary departures and socio-political issues, the data suggests a gradual shift towards greater gender equality in the superintendency in Massachusetts. As Massachusetts

continues to navigate these dynamics, attention to the factors influencing attrition and proactive measures to support diverse leadership pipelines will be critical in ensuring the stability and effectiveness of the state's school districts in the years to come.



THE SUPERINTENDENT LAB

presents

Massachusetts Superintendent Attrition

By: Sarah A. Harper, Research Assistant, The Superintendent Lab; MPA Candidate, University of Tennessee

Between 2019-20 and 2023-24



42.7%

of districts experienced
1 superintendent
departure



10.4%

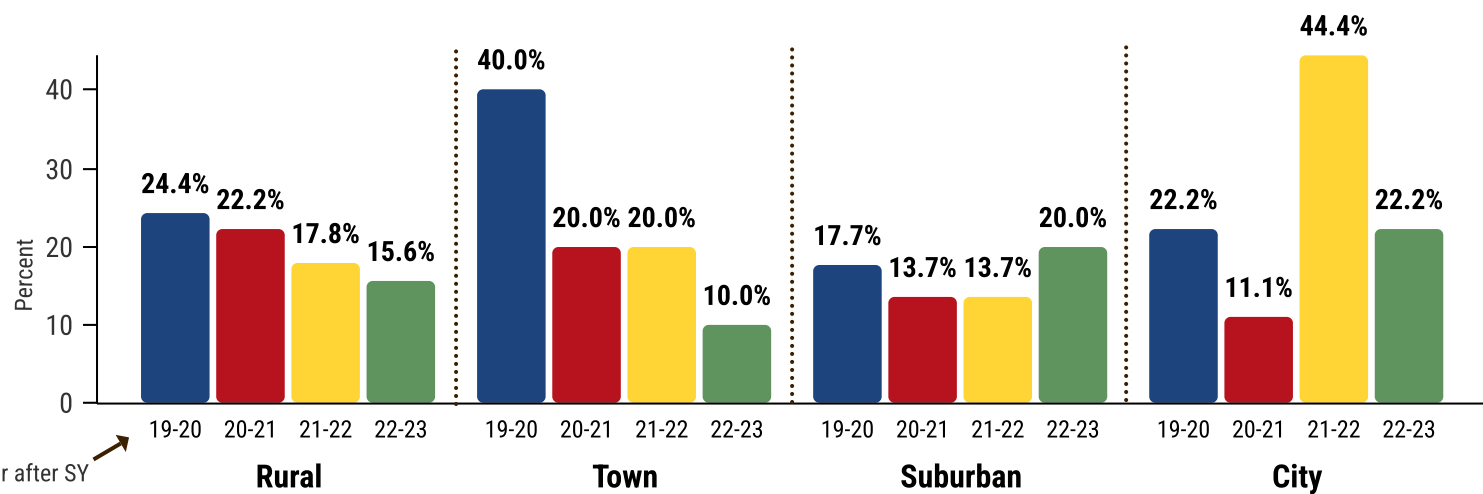
of districts experienced
2 superintendent
departures



1.2%

of districts experienced
3+ superintendent
departures

Superintendent Attrition by Locale & Year

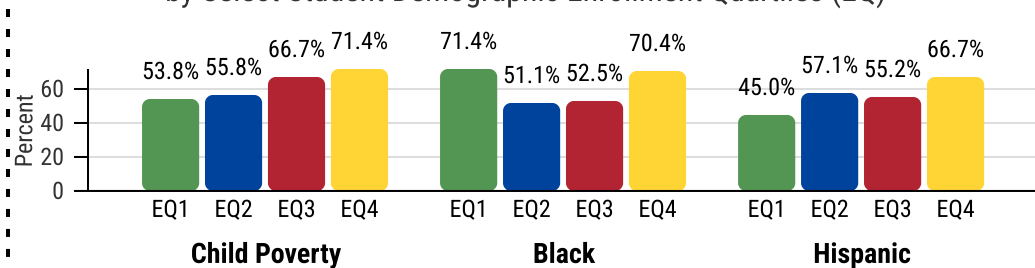


Massachusetts superintendent attrition is decreasing from highs in prior years.

Town and city attrition rates decreased by half between 2021-22 and 2022-23. Rural and town districts are steadily trending downward, while suburban and city district attrition is less predictable.

Superintendent Attrition by District Demographics

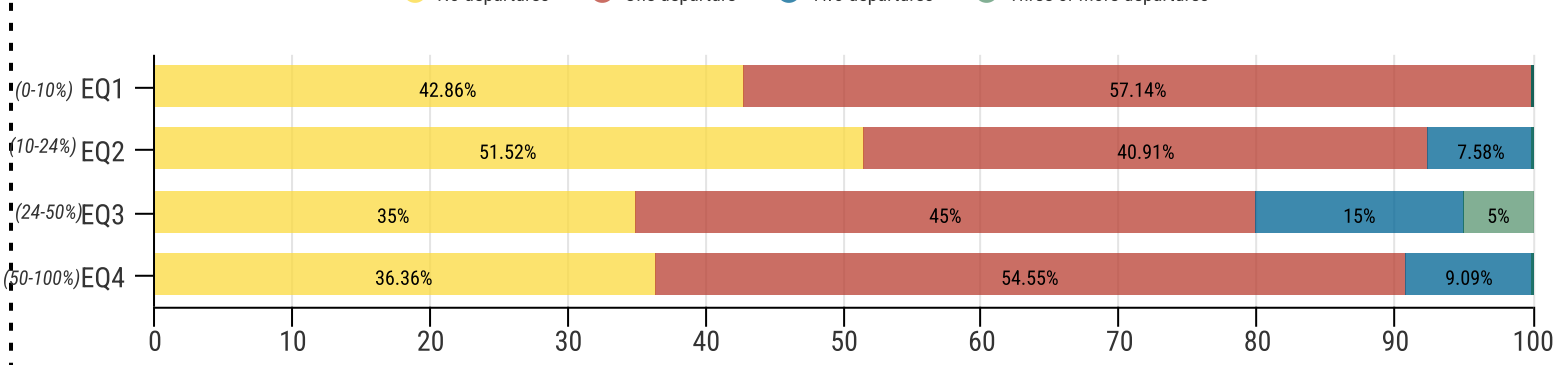
Percent of Districts that Experienced at Least One Superintendent Departure, by Select Student Demographic Enrollment Quartiles (EQ)



Though not statistically significant due to small sample sizes, the increased attrition rate in districts with high child poverty warrants consideration by policymakers.

Percent of Districts that Experienced 0 to 4 Superintendent Departures, by Percent Students of Color Enrollment Quartile (EQ)

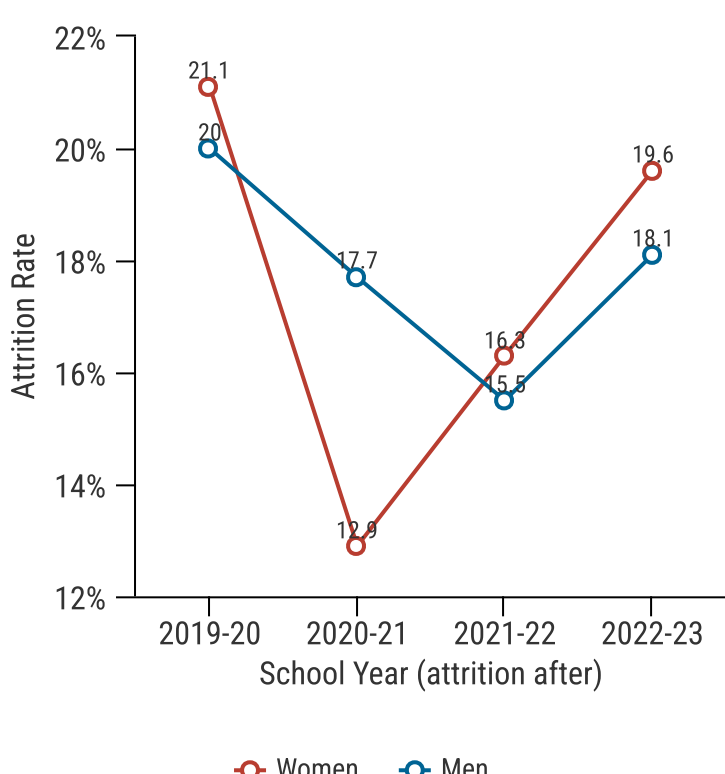
Legend: No departures (Yellow), One departure (Red), Two departures (Blue), Three or more departures (Green)



Districts with larger proportions of students of color are more likely to have experienced multiple turnover events since 2019-20.

State policymakers should consider the ways in which enduring financial inequities and underfunding of districts serving higher concentrations of students of color influence district resources and working conditions, and if and how this may contribute to undesirable superintendent churn.

Superintendent Attrition Rates, by Gender & Year



During the COVID-19 pandemic, the attrition rate for women decreased at nearly double the rate it did for men.

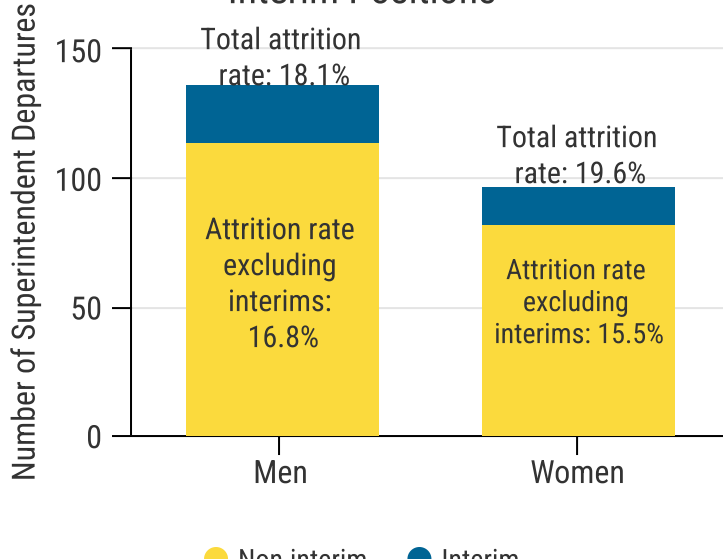
Attrition rates post-pandemic plummeted for both genders, but rates are now on the rise.

Women superintendents' attrition rate spiked to 19.6% this past year.

Concerted efforts by school boards, superintendent support organizations, researchers, and policymakers are needed to **better understand the contributors to and consequences of increasing attrition rates for women.**

What are the necessary steps to create supportive work environments for women superintendents?

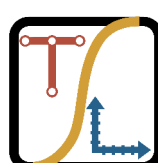
Attrition Attributable to Permanent vs. Interim Positions



Note that women are significantly more likely to serve as interim superintendents nationwide (see [TSL's Gender Gap infographic](#)).

When excluding interims, women superintendents' attrition rates drop below that of men.

1.67% of male superintendents are interim, compared to 6.46% of women superintendents.



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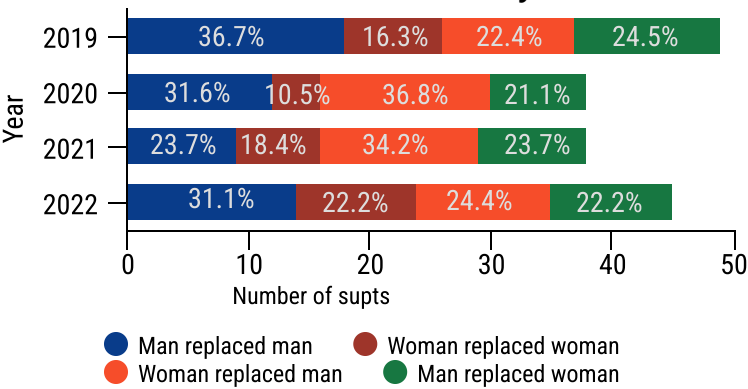
Gender and the Massachusetts Superintendency

2019-20 to 2023-24

By: Sarah A. Harper, Research Assistant, The Superintendent Lab and MPA Candidate, University of Tennessee-Knoxville & Dr. Rachel S. White, Founder, The Superintendent Lab and Asst. Professor, University of Tennessee-Knoxville

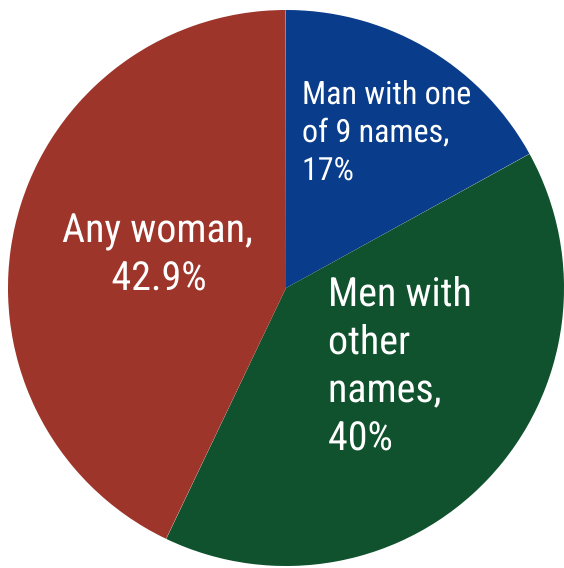
Who Replaces Who?

Gendered Turnover, by Year



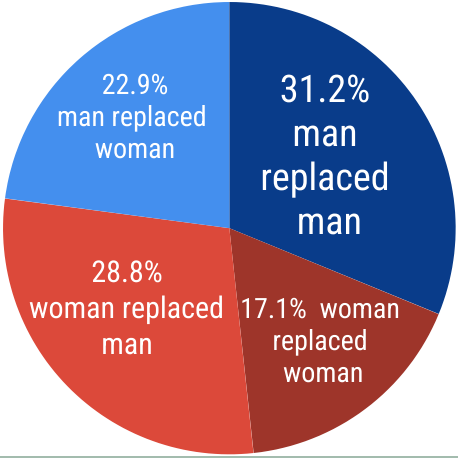
The first name of **1 out of every 5** Massachusetts superintendents is

John, Dave, Jeff, Michael, James/Jim, Robert, Jason, Scott, Will/Bill



In 2023-24, female superintendents in Massachusetts occupied **over 2 of every 5** superintendent positions. This is **above the national average**.

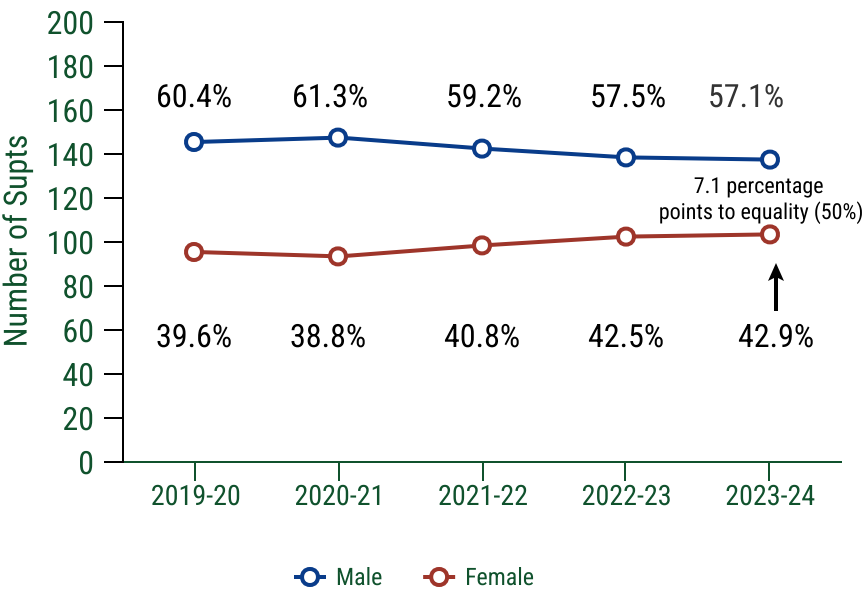
Gendered Turnover, pooled 2019-20 to 2023-24



Women are being selected to take over positions held by men at a slightly higher rate than men are taking over positions held by women, **a promising sign for narrowing the gender gap**

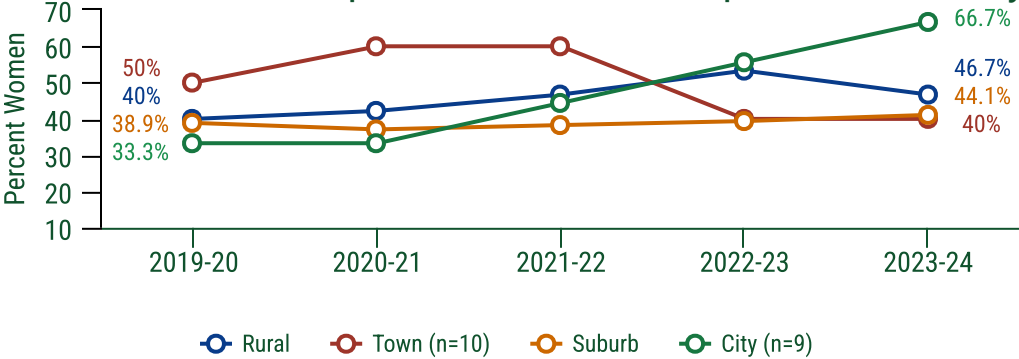
2034

estimated year of gender equality at current rate



Where are Women Superintendents Gaining the Most Ground?

Proportion of Women Superintendents, by locale, by year

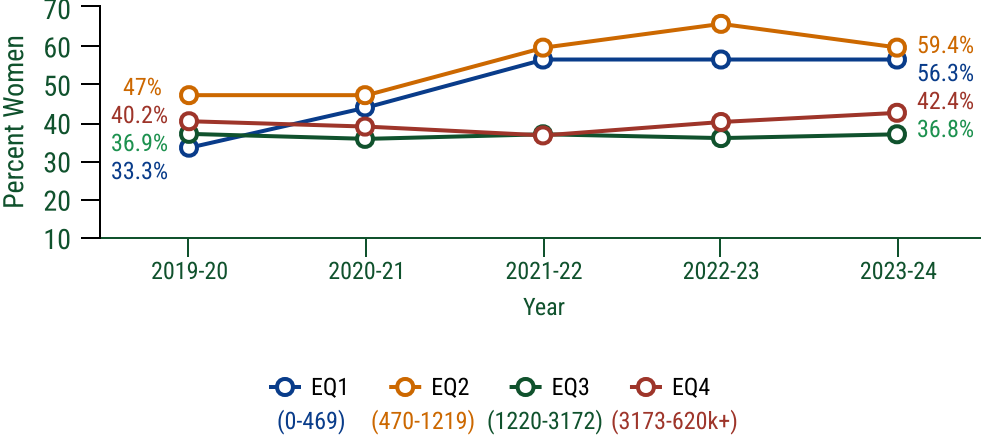


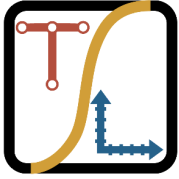
City districts experienced the **largest increase in women superintendents**

over the past 5 years, while the number of women superintendents in town districts **sharply declined**.

The **smallest** districts experienced the **largest increase in women superintendents** over the past 5 years. **Women's representation in the largest districts has remained relatively stagnant.**

Proportion of Women Superintendents, by student enrollment quartile (EQ), by year





THE SUPERINTENDENT LAB

Research Brief

Superintendent Attrition Trends in New Jersey

By Sarah A. Harper, Research Assistant, The Superintendent Lab and MPA Candidate, The University of Tennessee Knoxville;

Dr. Rachel S. White, Founder, The Superintendent Lab and Asst. Professor, The University of Tennessee Knoxville

Introduction

Superintendent attrition in New Jersey occurs at a far lower rate than in many other states. Between 2019 and 2023, 36.2% of districts in the state experienced a superintendent departure. Superintendents in New Jersey are turning over at a healthy rate for seemingly un concerning reasons. However, New Jersey experienced extremely high turnover after the 2020-2021 school year, reflecting a nationwide trend in post-COVID instability. This brief seeks to analyze attrition trends in the state and draw comparisons between national and state-level data.

Data & Methods

This analysis utilizes data sourced from the National Longitudinal Superintendent Database (NLSD) (White, 2023), which includes demographics of superintendents and details of attrition circumstances within traditional K-12 public school districts in the United States (n~12,500 annually). Within the NLSD, every district is categorized as a rural, town, suburban, or city based on the U.S. Department of Education Common Core of Data (CCD) (2018) classification. The NLSD also includes data on each district's student demographics and

enrollment based on CCD data as well as Small Area Income Poverty Estimates (SAIPE), which is a measure of student poverty. SAIPE estimates have been found to be more reliable than using the proportion of students receiving free and reduced price lunch status, which serves as a proxy measure for the percentage of students living in poverty at best and often overestimates poverty rates. Using this student demographic data, student demographic quartile ranges are generated at the national level.

The NLSD also houses details about the nature and type of attrition. In particular, The Superintendent Lab research team engages in extensive culling of online news and engages in textual and sentiment analyses to gain deeper insights into the nature of the attrition event by coding attrition events for attrition type (e.g., retirement, resignation, fired/non-renewed), as well as the nature of the attrition (e.g., ostensibly amicable attrition or attrition taking place in a contentious environment or politicized context). For the purposes of this brief, we will focus on describing overall attrition trends, as well as attrition type.

Attrition Trends in New Jersey

Locale New Jersey attrition by locale is relatively unpredictable but is characterized by highs in the 2020-21 and 21-22 school years across all locales. Notably, one-third of city district superintendents turned over during this timeframe.



District Demographics In New Jersey, districts with higher proportions of Black students were moderately more likely to experience superintendent departure ($p = 0.07$). Though lacking statistical significance, a trend also emerges when evaluating attrition against the enrollment of Hispanic students. In Q1, (districts with the fewest Hispanic students) attrition across the past five years was 28.6%. In Q4, that percentage almost doubled to 52.1%. When race is pooled, the data reveals that districts comprised of more than 90% White students experienced one or less superintendent turnover event in the last five years. Districts with more students of color experienced higher amounts of attrition – 53.3% of districts in the highest enrollment quartile experienced one or more turnover event. At the national level, we see a statistically significant link between the percentage of Black students and increased turnover, which is not present in New Jersey.

Gender

Gender gaps remain at both the national & state level. In order to close gender gaps, women need to replace men superintendents at a higher rate. This emphasizes the importance of examining attrition by gender. At present, 65% of New Jersey superintendents are male, while the remaining 35% are female. The percentage of female superintendents in New Jersey is slightly above the national average (28.6%), and women are replacing male superintendents at a higher rate than men are replacing female superintendents. This is a promising sign for further narrowing the gender gap in the superintendency and identifies New Jersey as a moderately

favorable environment for women superintendents. At the current rate of growth, women could comprise 50% New Jersey superintendents by 2046, 7 years later than the national projection. Women are taking leadership of the medium-large districts (1220-3172 students) the fastest – gaining 8.2 percentage points over the past five school years. In the largest and smallest districts, women's participation in the superintendency stagnated or decreased.

Interim Turnover Interim superintendents or acting superintendents are difficult to classify correctly due to their often short tenure and inconsistencies in media coverage and district reporting of their status. The Superintendent Lab aims to capture and classify as many interims as possible; however, because we collect our data by hand during particular times of the year, we likely underestimate the number of interim superintendents. Nonetheless, it is important to note that attrition rates for both men and women are lower when interims are excluded from the count. The attrition rate for women dropped 0.9% when interims were excluded, while the attrition rate for men dropped 0.8%. In New Jersey, women serve as interims at about the same rate as men, which is a departure from the national trend.

Nature of Attrition in New Jersey

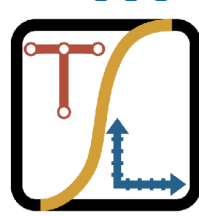
Between the 2022-23 and 2023-24 school years, 77.5% of superintendent attrition events were portrayed in the media as voluntary – interim departures, retirements, or relocations to other districts or professions. 8.75% were portrayed as taking place in a contentious or politicized



context, mostly due to conflicts with the school board or undisclosed circumstances. The remaining 8.75% were lacking publicly-available information on the nature of the departure.

Conclusion

The analysis of superintendent attrition in New Jersey provides valuable insights into trends and patterns within the state's educational leadership climate. Despite experiencing a surge in turnover rates following the 2020-2021 school year, largely attributed to the destabilizing effects of the COVID-19 pandemic, New Jersey's superintendent attrition rates remain relatively stable and are notably lower than those observed in many other states. New Jersey is otherwise average (or slightly above) in gender equality and other important markers. As New Jersey continues to navigate these dynamics, attention to the factors influencing attrition and proactive measures to support diverse leadership pipelines will be critical in ensuring the stability and effectiveness of the state's school districts in the years to come.



THE SUPERINTENDENT LAB

presents

New Jersey Superintendent Attrition

By: Sarah A. Harper, Research Assistant, The Superintendent Lab; MPA Candidate, University of Tennessee

Between 2019-20 and 2023-24



36.2%

of districts experienced
1 superintendent
departure



9.9%

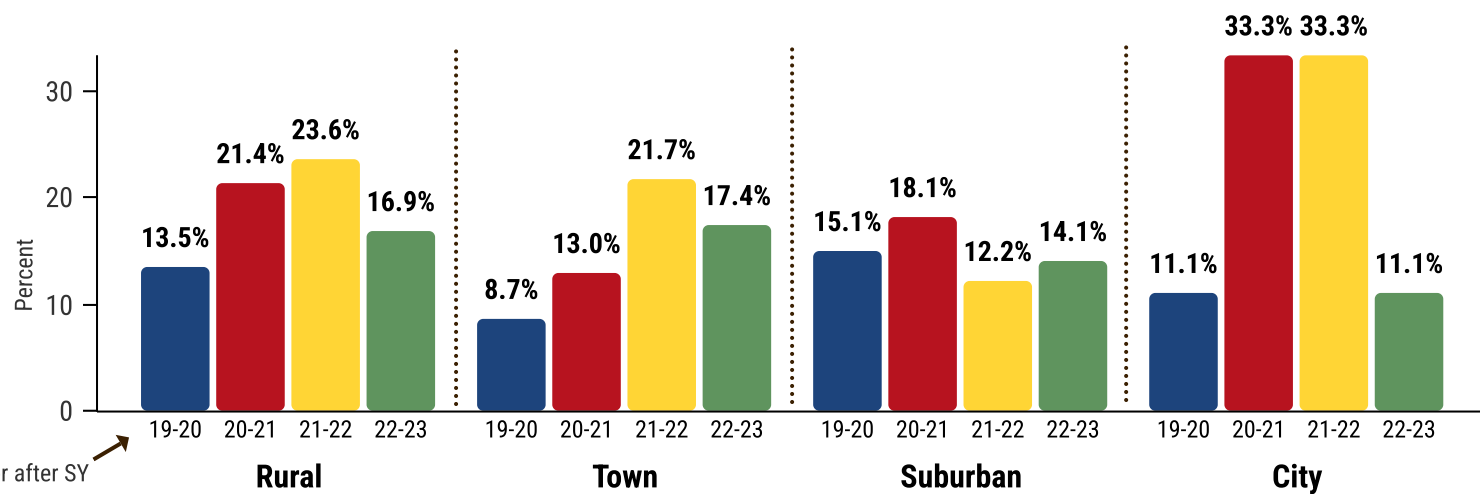
of districts experienced
2 superintendent
departures



1.3%

of districts experienced
3+ superintendent
departures

Superintendent Attrition by Locale & Year

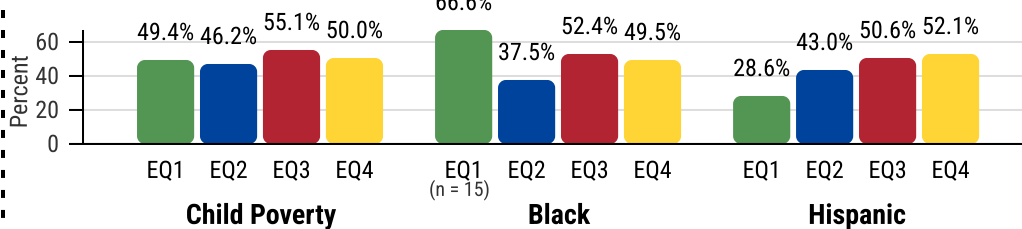


New Jersey superintendent attrition is unpredictable.

Rural and town attrition rates are decreasing from highs in prior years. Suburban and city district attrition is less predictable. One-third of city superintendents turned over in 2020-21 and 2021-22.

Superintendent Attrition by District Demographics

Percent of Districts that Experienced at Least One Superintendent Departure, by Select Student Demographic Enrollment Quartiles (EQ)

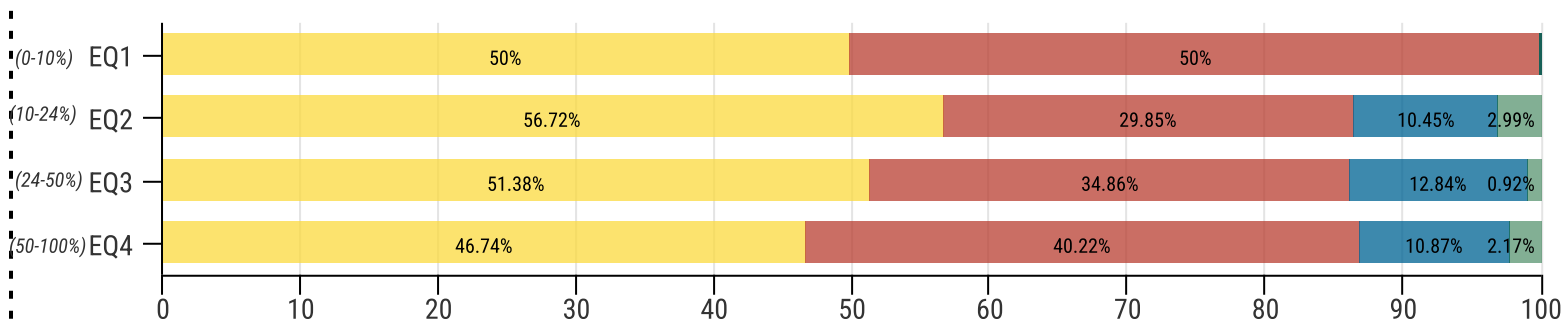


Districts with higher proportions of Black students are moderately more likely to experience superintendent departure ($p=0.07$)

No statistically significant differences in superintendent departure based on Child Poverty quartile and % Hispanic enrollment.

Percent of Districts that Experienced 0 to 4 Superintendent Departures, by Percent Students of Color Enrollment Quartile (EQ)

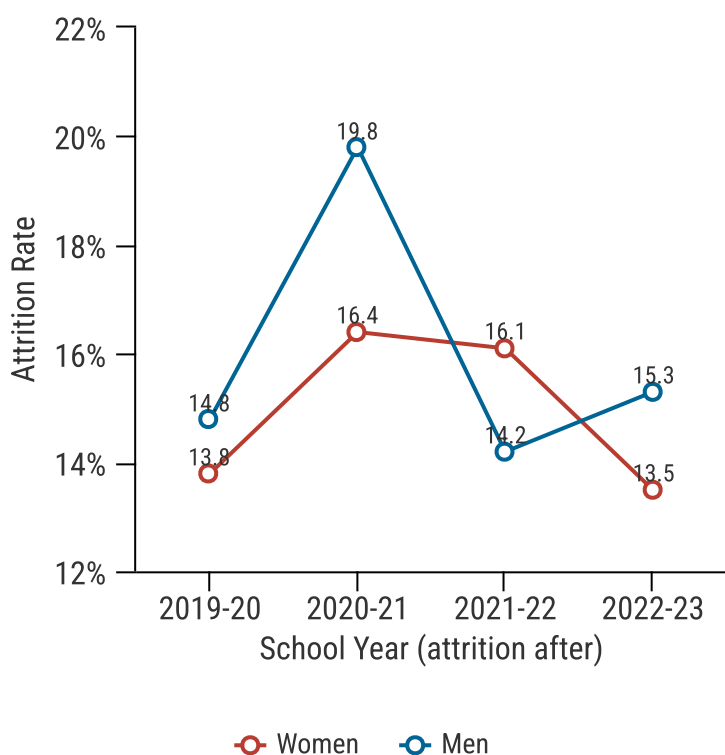
● No departures ● One departure ● Two departures ● Three or more departures



Districts with larger proportions of students of color are more likely to have experienced multiple turnover events since 2019-20.

State and federal policymakers need to consider the ways in which enduring financial inequities and underfunding of districts serving higher concentrations of students of color influence district resources and working conditions, and if and how this may contribute to undesirable superintendent churn.

Superintendent Attrition Rates, by Gender & Year



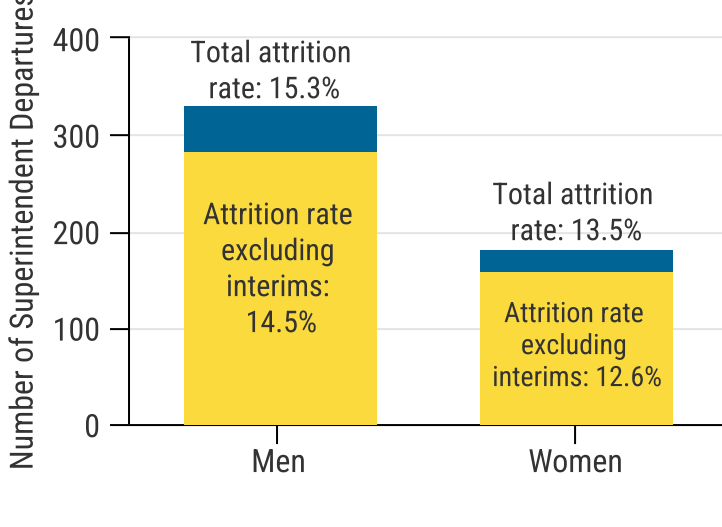
During the COVID-19 pandemic, the attrition rate for men increased at nearly double the rate it did for women. However, the attrition rate for men has returned to pre-pandemic levels over the last three years.

Women superintendents' attrition rate increased less than three percentage points during the pandemic.

Women superintendents in New Jersey seem to have consistently lower attrition rates than men. Women's attrition rates also appear steadier.

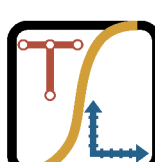
What are the necessary steps to create supportive work environments for all superintendents?

Attrition Attributable to Permanent vs. Interim Positions



Note that women are significantly more likely to serve as interim superintendents nationwide (see [TSL's Gender Gap infographic](#)).

When excluding interims, the difference in attrition between 2022-23 and 2023-24 for men and women narrows; nonetheless, the attrition rate for men remains higher than that of women.

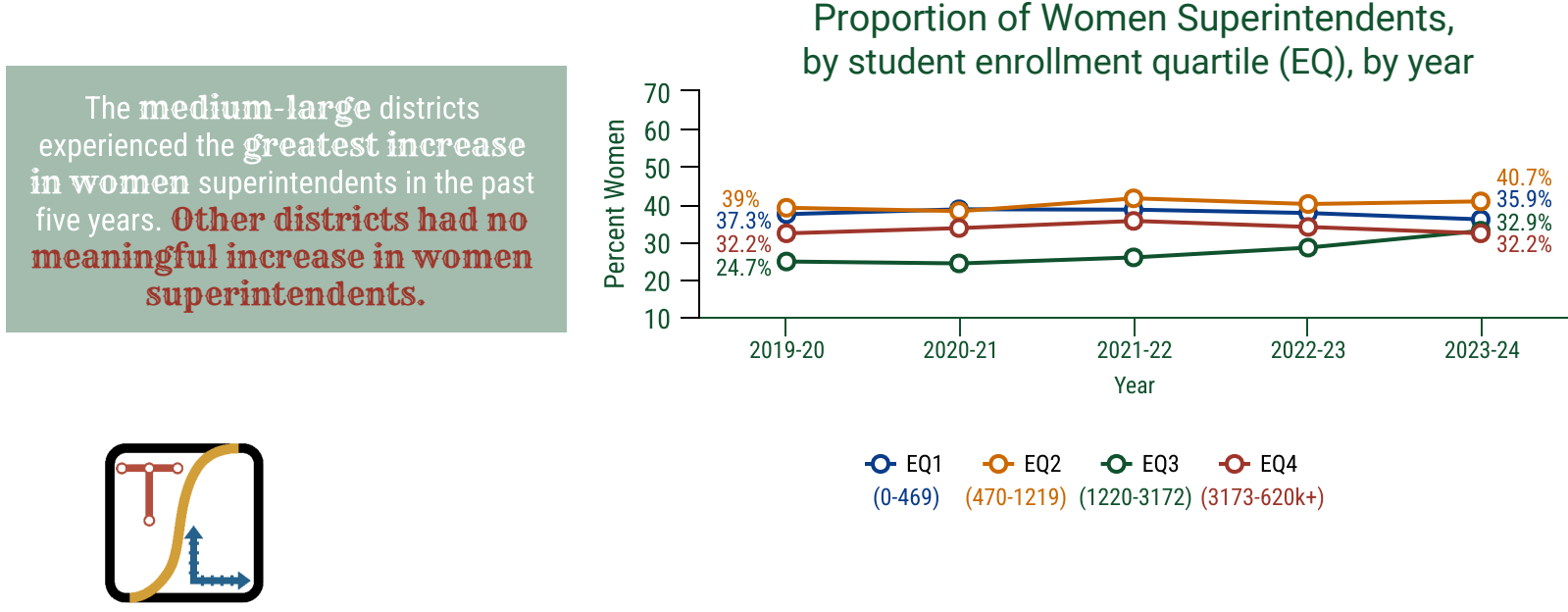
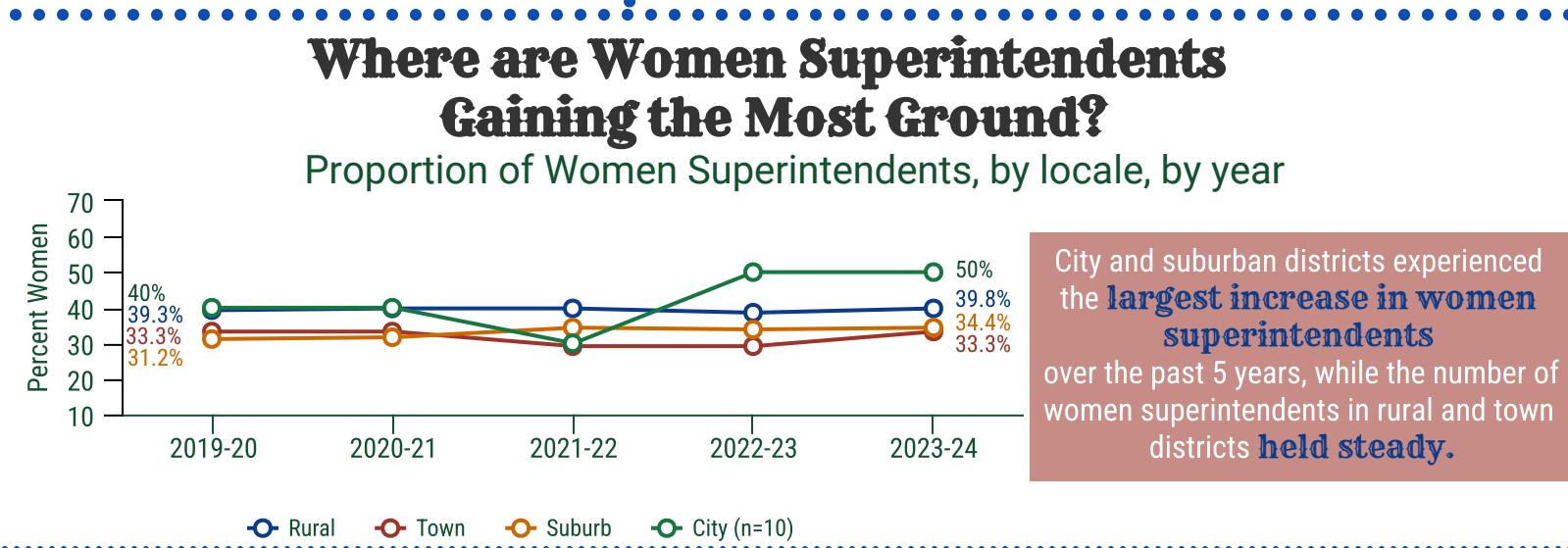
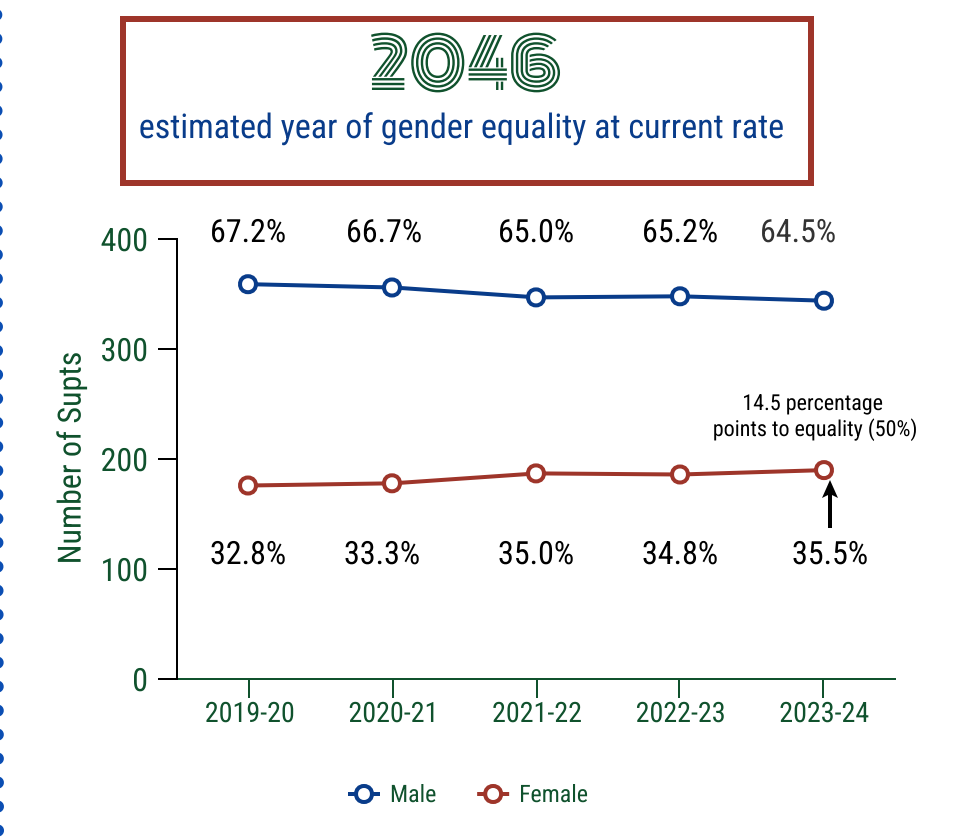
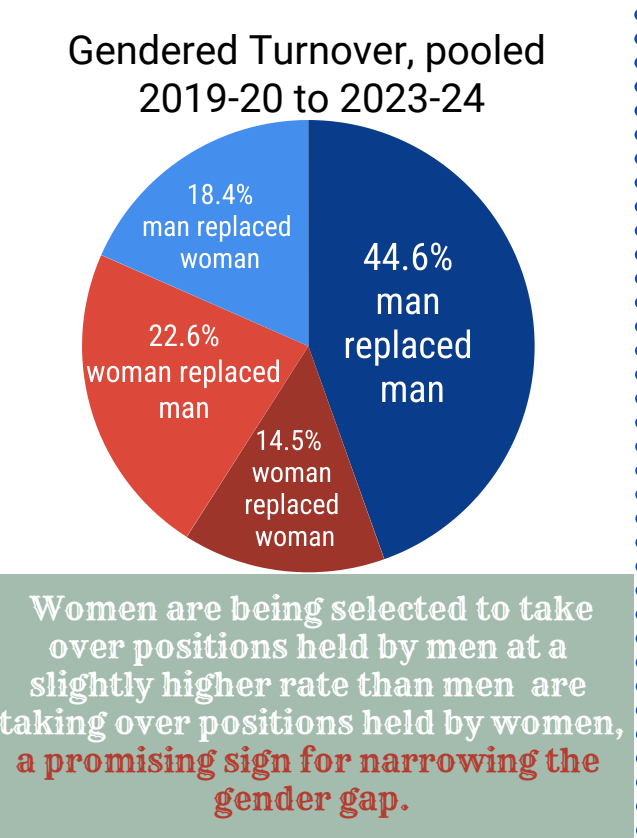
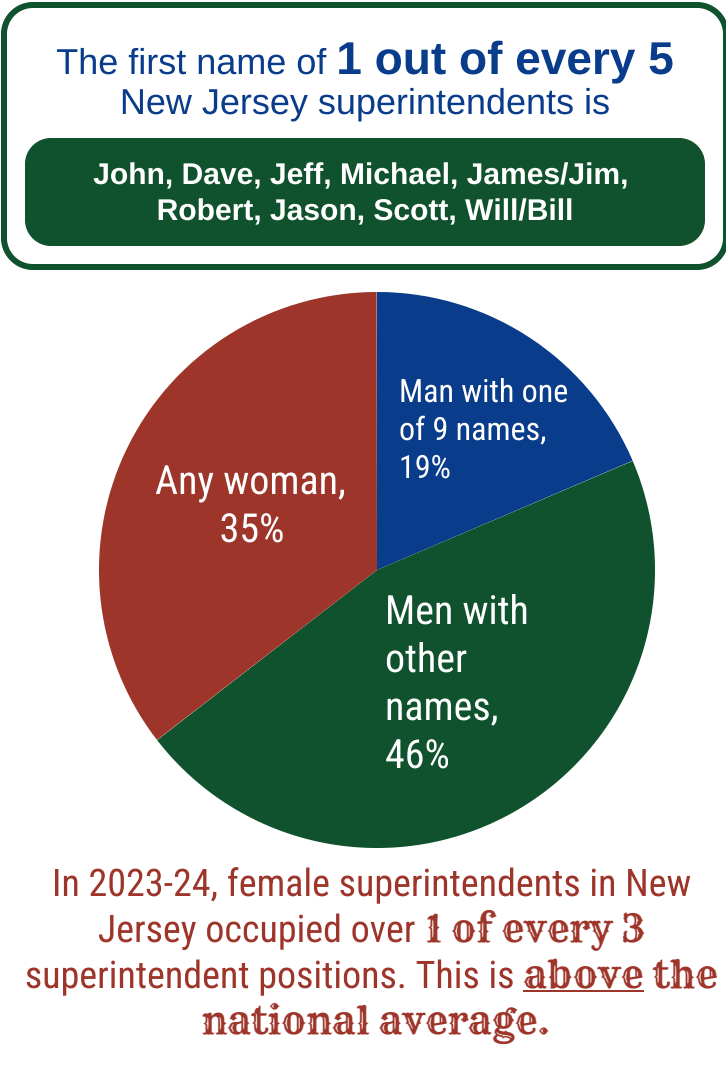
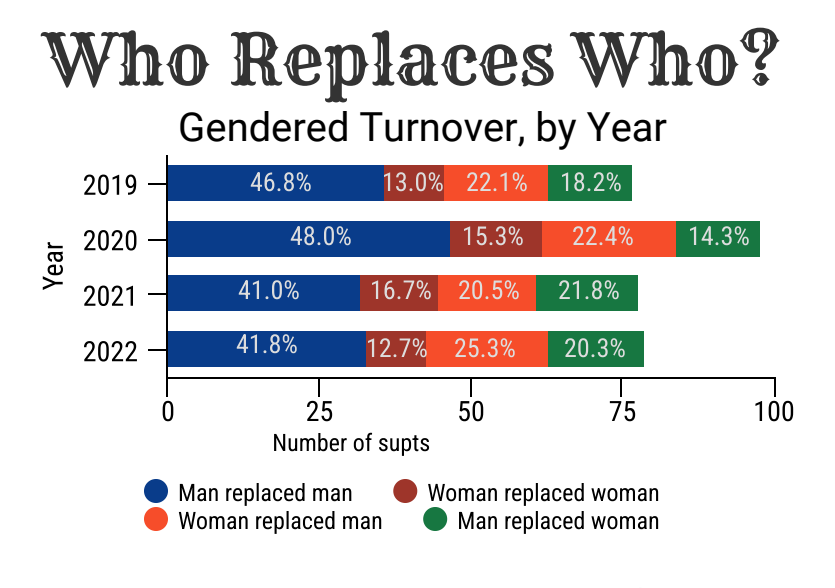


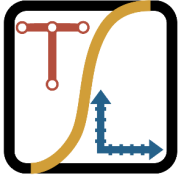
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THE SUPERINTENDENT LAB

Research Brief

Superintendent Attrition Trends in Tennessee

By Sarah A. Harper, Research Assistant, The Superintendent Lab and MPA Candidate, The University of Tennessee Knoxville;

Dr. Rachel S. White, Founder, The Superintendent Lab and Asst. Professor, The University of Tennessee Knoxville

Introduction

Through the potential impacts on district stability, morale, and leadership continuity, superintendent attrition can have implications for students, teachers, and communities. In Tennessee, between 2019 and 2023, 42% of districts experienced at least one superintendent departure. This rate is on par with the national rate of 41.3%. Superintendents play a pivotal role in shaping the direction, policies, and academic outcomes of school districts. This brief seeks to analyze attrition trends in the state and draw comparisons between national and state-level superintendent attrition patterns.

Data & Methods

This analysis utilizes data sourced from the National Longitudinal Superintendent Database (NLSD) (White, 2023), which includes demographics of superintendents and details of attrition circumstances within traditional K-12 public school districts in the United States (n~12,500 annually). Within the NLSD, every district is categorized as a rural, town, suburban, or city based on the U.S. Department of Education Common Core of Data (CCD) (2018) classification. The NLSD also includes data on each

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Attrition Trends in Tennessee

Locale Superintendent attrition has increased all locales since the 2020-21 school year. Attrition rates in all districts (except city) saw highs after the 2019-20 school year, likely due to uncertainty surrounding the COVID-19 pandemic. Rates



sharply declined after the 2020-21 school year, but are now trending upwards once more. Notably, superintendent attrition in city districts spiked to 35.7% after the 2021-22 school year. Attrition rates in rural areas are trending upward, more than quadrupling between the 2019-20 and 2022-23 school years. Overall, attrition rates in rural, town, and suburban districts are significantly lower than city districts. Tennessee is consistent with national averages for attrition in all locales except city districts, where national averages are much lower.

District Demographics Demographics are analyzed based on quartiles of child poverty and race. In Tennessee, low sample sizes in some student poverty and race quartiles inhibit our ability to examine if there are statistically significant differences in superintendent attrition rates based on student demographics. Currently, there is no statistically significant difference in superintendent departure based on child poverty quartile or percent Hispanic students. However, districts in higher quartiles of child poverty have a higher rate of superintendent turnover than districts in EQ1. A statistically significant difference does exist when attrition is analyzed based on the percentage of Black students enrolled in the district ($p=0.02$).

Gender Gender gaps remain at both the national & state level. In order to close gender gaps, women need to replace men superintendents at a higher rate. This emphasizes the importance of examining attrition by gender. At present, 70.7% of Tennessee superintendents are men, while the remaining 29.4% are women. The

percentage of female superintendents in Tennessee is slightly above the national average (28.6%). When superintendents turnover, women are replacing male superintendents at a substantially higher rate (27.2%) than men are replacing female superintendents (19.6%). However, women have an overall attrition rate than men, 17.4% versus 14.4% last year, respectively. Steps should be taken by districts and policymakers to evaluate the reasons for elevated turnover rates among women superintendents and establish mechanisms of support for them. Women's representation in superintendencies is most rapidly increasing in the largest districts. For example, in districts with more than 3,173 students (Q4 enrollment), women's participation in the superintendency jumped from 18.4% to 27.3% in just 5 years – a promising 8.9 percentage point gain. Since the 2019-20 school year, all locales have seen an increase in women superintendents except town districts, which comprise 28% of the state's districts.

Interim Turnover Interim superintendents or acting superintendents are difficult to classify correctly due to their often short tenure and inconsistencies in media coverage and district reporting of their status. The Superintendent Lab aims to capture and classify as many interims as possible; however, because we collect our data by hand during particular times of the year, we likely underestimate the number of interim superintendents. Nonetheless, it is important to note that attrition rates for both men and women are lower when interims are excluded from the count. The attrition rate for women dropped 3.8% when interims were excluded, while the attrition rate for



men dropped 2.7%. Nationally, women tend to serve as interims at a higher rate than men, which is echoed in Tennessee.

stability and effectiveness of the state's school districts in the years to come.

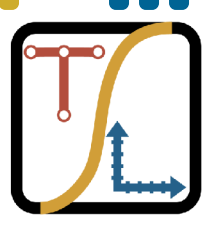
Nature of Attrition in Tennessee

Between the 2022-23 and 2023-24 school years, 95.5% of superintendent attrition events were portrayed in the media and news as voluntary (e.g., planned interim departures, retirements, or relocations to other districts or professions). The nature of the remaining 4.5% of turnovers could not be ascribed due to a lack of data.

Tennessee stands out for its low proportion of missing data, signaling an emphasis on transparency in the superintendency. Also noteworthy is the lack of ostensibly involuntary turnover (i.e. firings, political resignations, arrests, etc.) present in the state during the timeframe of data collection.

Conclusion

The analysis of superintendent attrition in Tennessee reveals a decidedly neutral state of the superintendency. The state sees turnover rates consistent with national averages in almost all categories of analysis. The data also suggests modest growth in the number of women in the superintendency in Tennessee, though the proportion of women superintendents currently matches the national average. Women superintendents in Tennessee see slightly elevated attrition rates as compared to their male counterparts, which warrants further analysis and action. Though there do not appear to be dramatic issues within the superintendency in Tennessee, proactive measures to support diverse leadership pipelines will be critical in ensuring the



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Tennessee Superintendent Attrition

By: Sarah A. Harper, Research Assistant, The Superintendent Lab; MPA Candidate, University of Tennessee

Between 2019-20 and 2023-24



42%

of districts experienced
1 superintendent
departure



9.1%

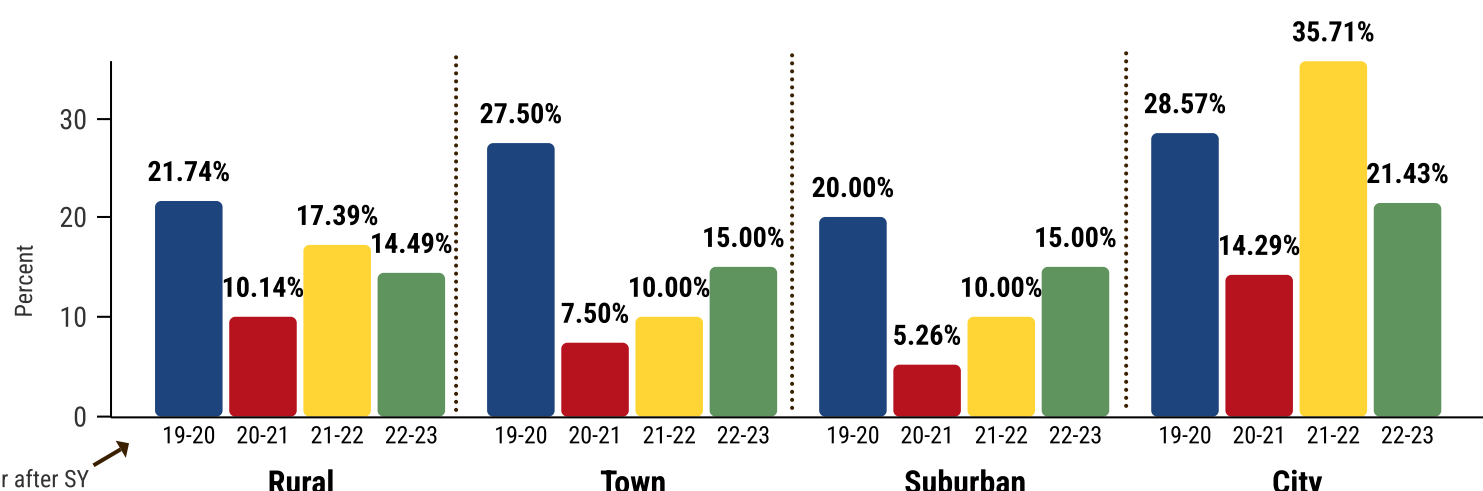
of districts experienced
2 superintendent
departures



0.7%

of districts experienced
3+ superintendent
departures

Superintendent Attrition by Locale & Year

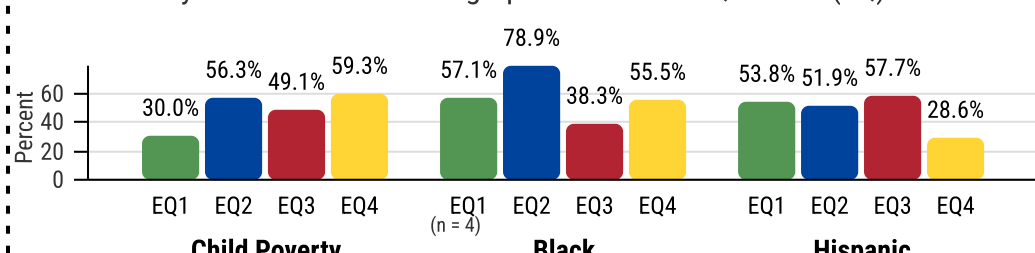


Tennessee superintendent attrition has increased from lows after the 2020-21 school year.

Attrition spiked in all locales after the 2019-20 school year, likely due to the COVID-19 pandemic. All districts appear to be trending upward after lows in 2020-21.

Superintendent Attrition by District Demographics

Percent of Districts that Experienced at Least One Superintendent Departure, by Select Student Demographic Enrollment Quartiles (EQ)

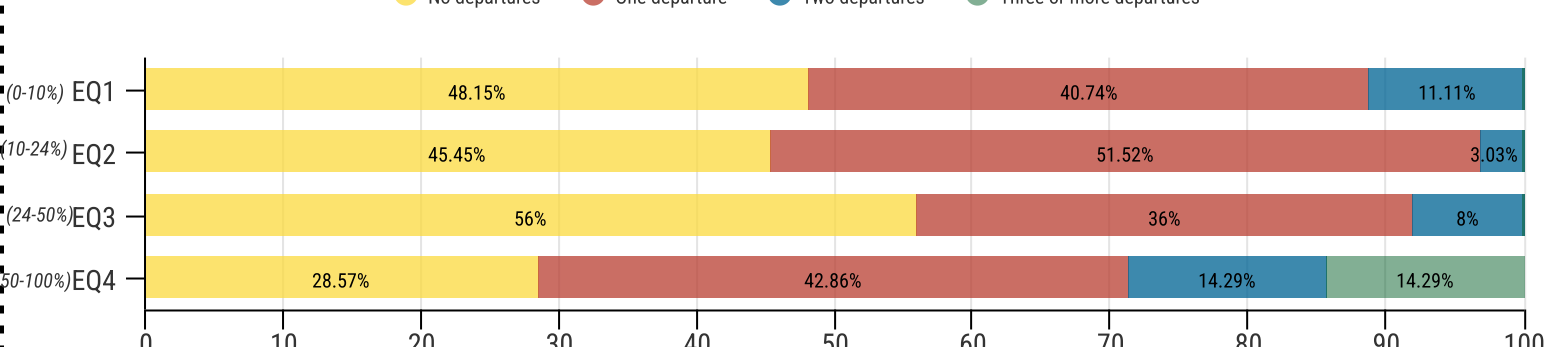


Statistically significant difference in superintendent departure based on % Black students ($p = 0.02$).

No statistically significant differences in superintendent departure based on % Child Poverty or % Hispanic.

Percent of Districts that Experienced 0 to 4 Superintendent Departures, by Percent Students of Color Enrollment Quartile (EQ)

Legend: No departures (Yellow), One departure (Red), Two departures (Blue), Three or more departures (Green)



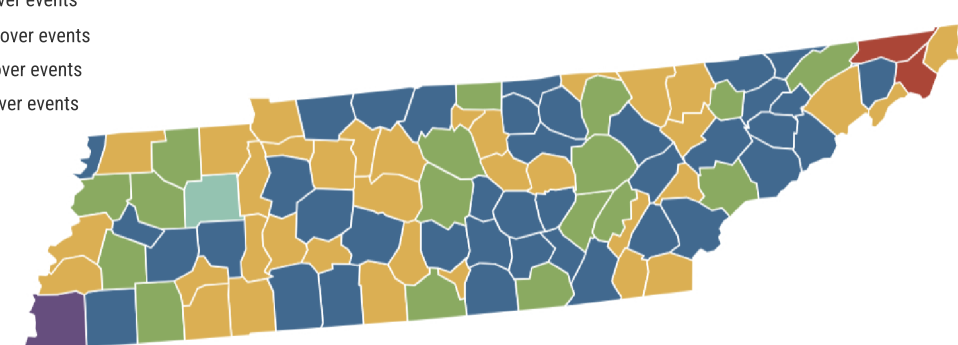
Districts with larger proportions of students of color are more likely to have experienced multiple turnover events since 2019-20.

State and federal policymakers need to consider the ways in which enduring financial inequities and underfunding of districts serving higher concentrations of students of color influence district resources and working conditions, and if and how this may contribute to undesirable superintendent churn.

Superintendent Attrition Rates, by District, 2020-23

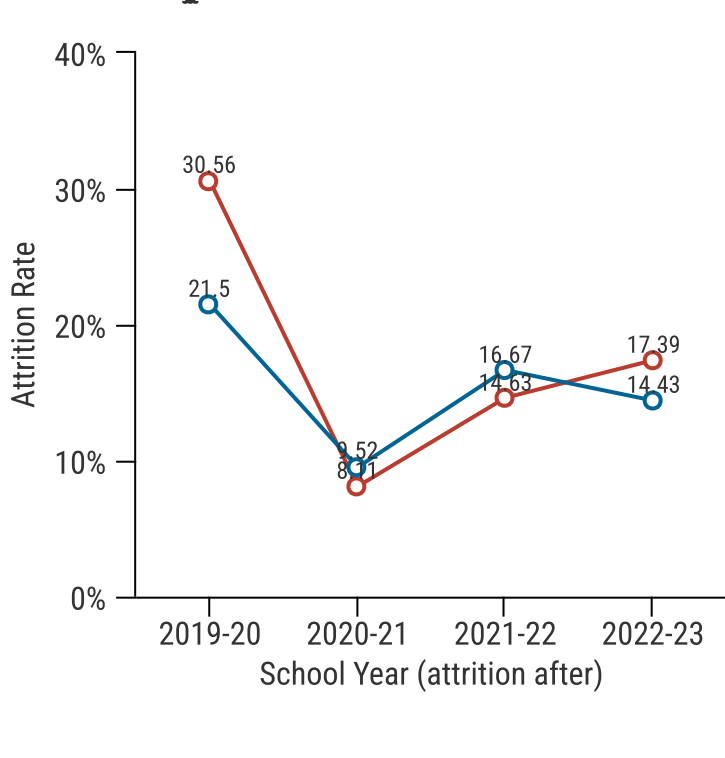
City districts led the state in superintendent attrition with an average attrition rate of 25% across four school years. Other locales had lower attrition rates.

Legend: Zero turnover events (Yellow), One turnover event (Blue), Two turnover events (Green), Three turnover events (Red), Four turnover events (Purple), Five turnover events (Teal)



*For the purposes of this map, city and consolidated district turnover is reflected in the county that geographically holds the largest share of the district.

Superintendent Attrition Rates, by Gender & Year



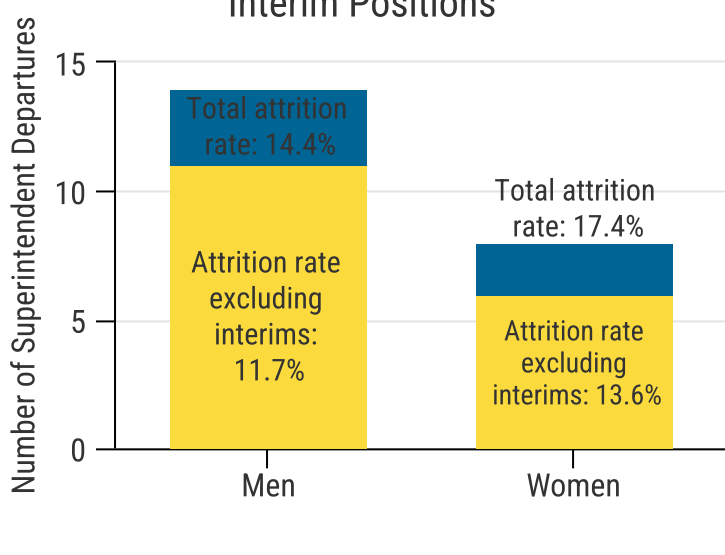
During the COVID-19 pandemic, the attrition rate for women was nearly nine percentage points higher than that of men. However, the attrition rates for both men and women superintendents have stabilized and become comparable.

Women superintendents' attrition rates are trending upwards.

Concerted efforts by school boards, superintendent support organizations, researchers, and policymakers are needed to **better understand the contributors to and consequences of increasing attrition rates for women.**

What are the necessary steps to create supportive work environments for women superintendents?

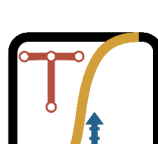
Attrition Attributable to Permanent vs. Interim Positions



Note that women are significantly more likely to serve as interim superintendents nationwide (see TSL's Gender Gap infographic).

In Tennessee, women serve as interims at a higher rate than men.

The attrition rates for both men and women decrease when interims are excluded, but women still turn over at a higher rate.



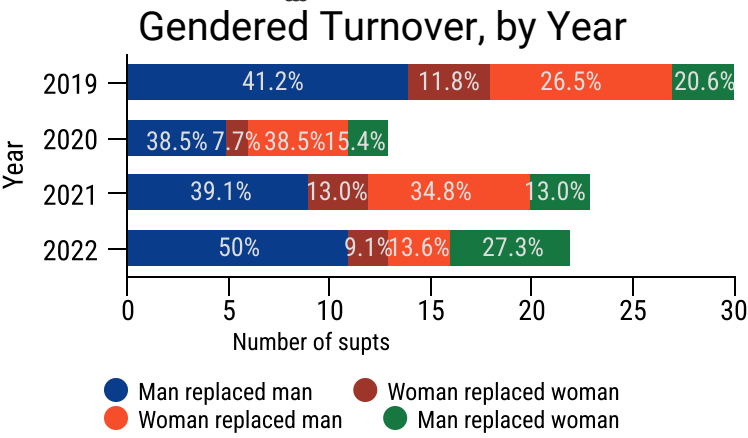
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Gender and the Tennessee Superintendency

2019-20 to 2023-24

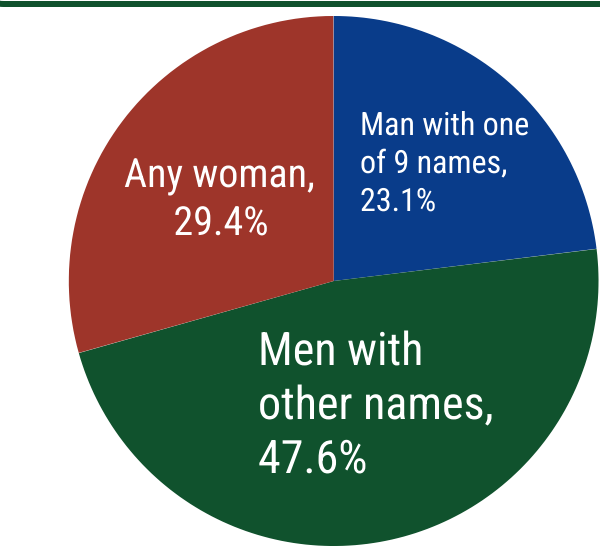
By: Sarah A. Harper
Research Assistant, The Superintendent Lab; MPA Candidate, University of Tennessee

Who Replaces Who?



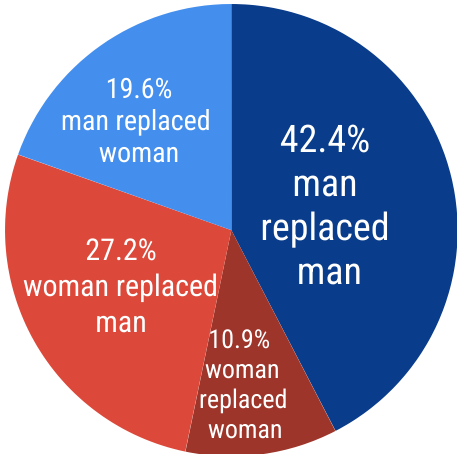
The first name of **almost 1 out of every 4** Tennessee superintendents is

John, Dave, Jeff, Michael, James/Jim, Robert, Jason, Scott, Will/Bill



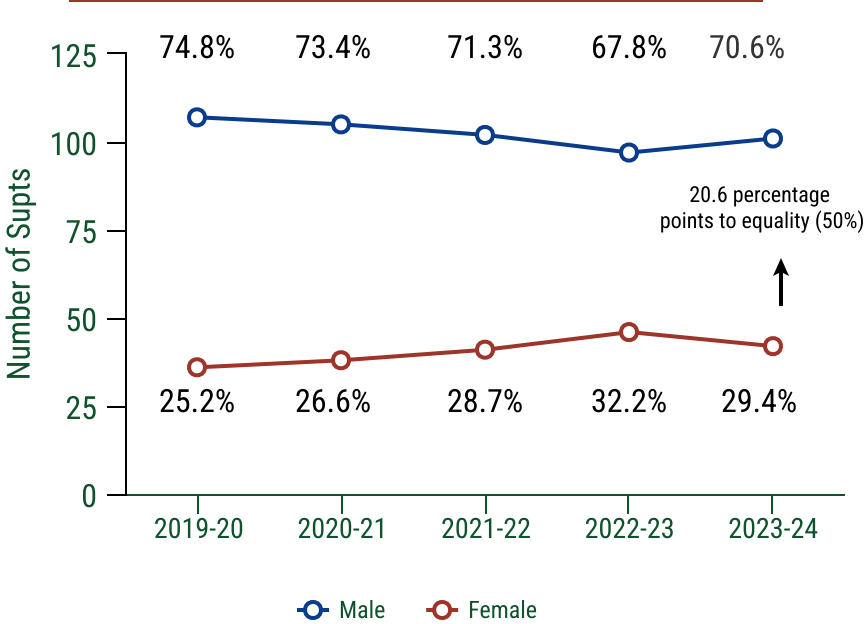
In 2023-24, female superintendents in Tennessee occupied **almost 3 of every 10** superintendent positions. This is slightly above the national average.

Gendered Turnover, pooled 2019-20 to 2023-24



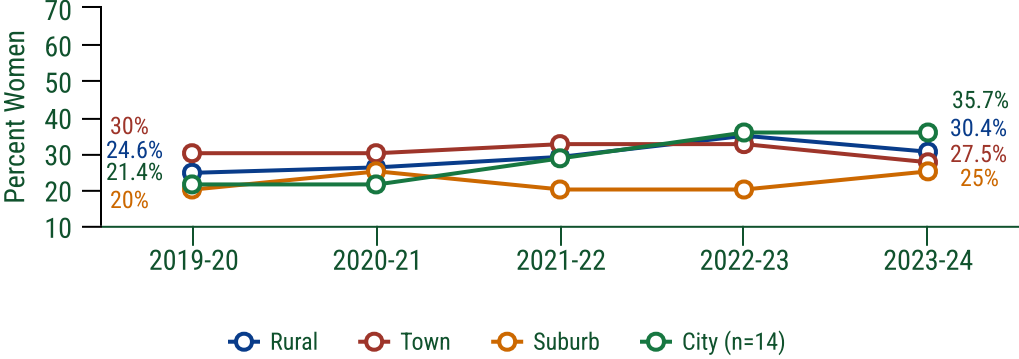
Women are being selected to take over positions held by men at a higher rate than men are taking over positions held by women, **a promising sign for narrowing the gender gap.**

2044
estimated year of gender equality at current rate



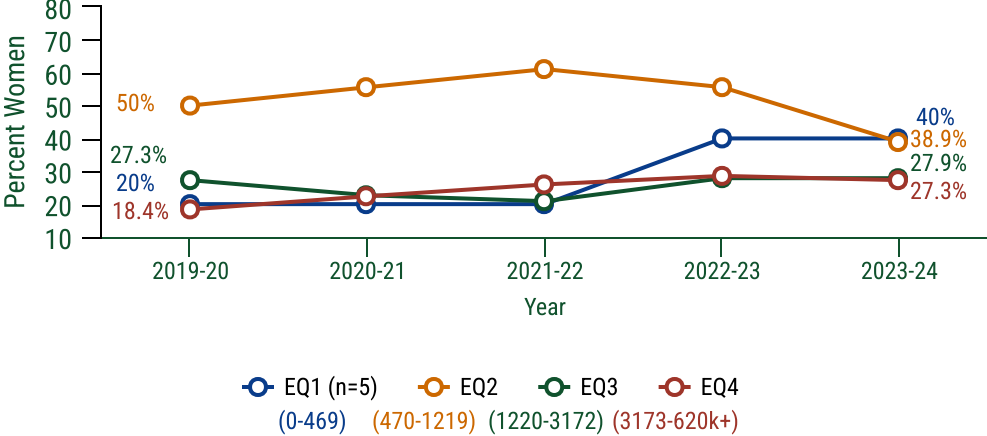
Where are Women Superintendents Gaining the Most Ground?

Proportion of Women Superintendents, by locale, by year

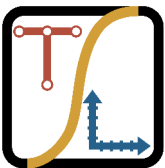


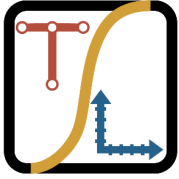
All locales experienced **increases in women superintendents** except towns, where the number of women **modestly declined**.

Proportion of Women Superintendents, by student enrollment quartile (EQ), by year



The **largest** districts experienced the **largest increase in women** superintendents in the past year. **Medium-small districts saw a dramatic loss in the number of women superintendents.**





THE SUPERINTENDENT LAB

Research Brief

Superintendent Attrition Trends in Virginia

By Sarah A. Harper, Research Assistant, The Superintendent Lab and MPA Candidate, The University of Tennessee Knoxville;

Dr. Rachel S. White, Founder, The Superintendent Lab and Asst. Professor, The University of Tennessee Knoxville

Introduction

Through the potential impacts on district stability, morale, and leadership continuity, superintendent attrition can have implications for students, teachers, and communities. In Virginia, between 2019 and 2023, 51.9% of districts experienced at least one superintendent departure. This rate is significantly higher than the national rate of 41.3%. Superintendents play a pivotal role in shaping the direction, policies, and academic outcomes of school districts. This brief seeks to analyze attrition trends in the state and draw comparisons between national and state-level superintendent attrition patterns.

Data & Methods

This analysis utilizes data sourced from the National Longitudinal Superintendent Database (NLSD) (White, 2023), which includes demographics of superintendents and details of attrition circumstances within traditional K-12 public school districts in the United States (n~12,500 annually). Within the NLSD, every district is categorized as a rural, town, suburban, or city based on the U.S. Department of Education Common Core of Data (CCD) (2018) classification. The NLSD also includes data on each

district's student demographics and enrollment based on CCD data as well as Small Area Income Poverty Estimates (SAIPE), which is a measure of student poverty. SAIPE estimates have been found to be more reliable than using the proportion of students receiving free and reduced price lunch status, which serves as a proxy measure for the percentage of students living in poverty at best and often overestimates poverty rates. Using this student demographic data, student demographic quartile ranges are generated at the national level.

The NLSD also houses details about the nature and type of attrition. In particular, The Superintendent Lab research team engages in extensive culling of online news and engages in textual and sentiment analyses to gain deeper insights into the nature of the attrition event by coding attrition events for attrition type (e.g., retirement, resignation, fired/non-renewed), as well as the nature of the attrition (e.g., ostensibly amicable attrition or attrition taking place in a contentious environment or politicized context). For the purposes of this brief, we will focus on describing overall attrition trends, as well as attrition type.

Attrition Trends in Virginia

Locale Superintendent attrition has increased all locales since the 2019-20 school year. Notably, superintendent attrition in city districts doubled from 13% to 26% between the 2021-22 and 2022-23 school years. Attrition rates in rural areas



are dramatically trending upward, more than quadrupling between the 2019-20 and 2022-23 school years. Attrition rates in town and suburban districts have also seen higher attrition rates than in prior years. Virginia has outpaced national averages for attrition in all locales except town districts.

District Demographics Demographics are analyzed based on quartiles of child poverty and race. In Virginia, low sample sizes in some student poverty and race quartiles inhibit our ability to examine if there are statistically significant differences in superintendent attrition rates based on student demographics. Currently, there is no statistically significant difference in superintendent departure based on child poverty quartile, percent Black students, or percent Hispanic students.

Gender Gender gaps remain at both the national & state level. In order to close gender gaps, women need to replace men superintendents at a higher rate. This emphasizes the importance of examining attrition by gender. At present, 60.2% of Virginia superintendents are men, while the remaining 39.8% are female. The state stands out as a particularly favorable environment for female superintendents. The percentage of female superintendents in Virginia is above the national average (28.6%). When superintendents turnover, women are replacing male superintendents at a substantially higher rate (28.6%) than men are replacing female superintendents (20.2%). Women also have a lower overall attrition rate than men, 13.5% versus 27.5% last year, respectively. This is a promising sign for further narrowing the gender gap in the superintendency. At the current rate of

growth, women could comprise 50% of Virginia superintendents as soon as 2032. Womens' representation in superintendencies is most rapidly increasing in the largest districts. For example, in districts with more than 3.173 students (Q4 enrollment), women's participation in the superintendency jumped from 25.7% to 33.8% in just 5 years – a promising 8.1 percentage point gain.

Interim Turnover Interim superintendents or acting superintendents are difficult to classify correctly due to their often short tenure and inconsistencies in media coverage and district reporting of their status. The Superintendent Lab aims to capture and classify as many interims as possible; however, because we collect our data by hand during particular times of the year, we likely underestimate the number of interim superintendents. Nonetheless, it is important to note that attrition rates for both men and women are lower when interims are excluded from the count. The attrition rate for women dropped 1.5% when interims were excluded, while the attrition rate for men dropped 1.9%. This counters the national trend, where women typically serve as interims at a higher rate than men.

Nature of Attrition in Virginia

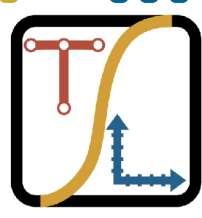
Between the 2022-23 and 2023-24 school years, 83% of superintendent attrition events were portrayed in the media and news as voluntary (e.g., planned interim departures, retirements, or relocations to other districts or professions). The remaining 17% were publicly described as taking place in a contentious environment or politicized context. For example, multiple



involuntary departures occurred in districts subject to investigation by law enforcement.

Conclusion

The analysis of superintendent attrition in Virginia reveals both promising developments and concerning trends. Virginia has experienced exceptionally high turnover rates, but a vast majority of that turnover appears to be voluntary. Despite the high turnover, the superintendency in Virginia appears to be moving in a healthy, positive direction, particularly in the increasing representation of women in the superintendency. Despite the complex nature of turnover events, which often involve legal and political issues, the data suggests a gradual shift towards greater gender equality in the superintendency in Virginia. As Virginia continues to see high turnover rates, attention to the factors influencing attrition and proactive measures to support diverse leadership pipelines will be critical in ensuring the stability and effectiveness of the state's school districts in the years to come.



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Virginia Superintendent Attrition

By: Sarah A. Harper, Research Assistant, The Superintendent Lab; MPA Candidate, University of Tennessee

Between 2019-20 and 2023-24



51.9%

of districts experienced
1 superintendent
departure



6.0%

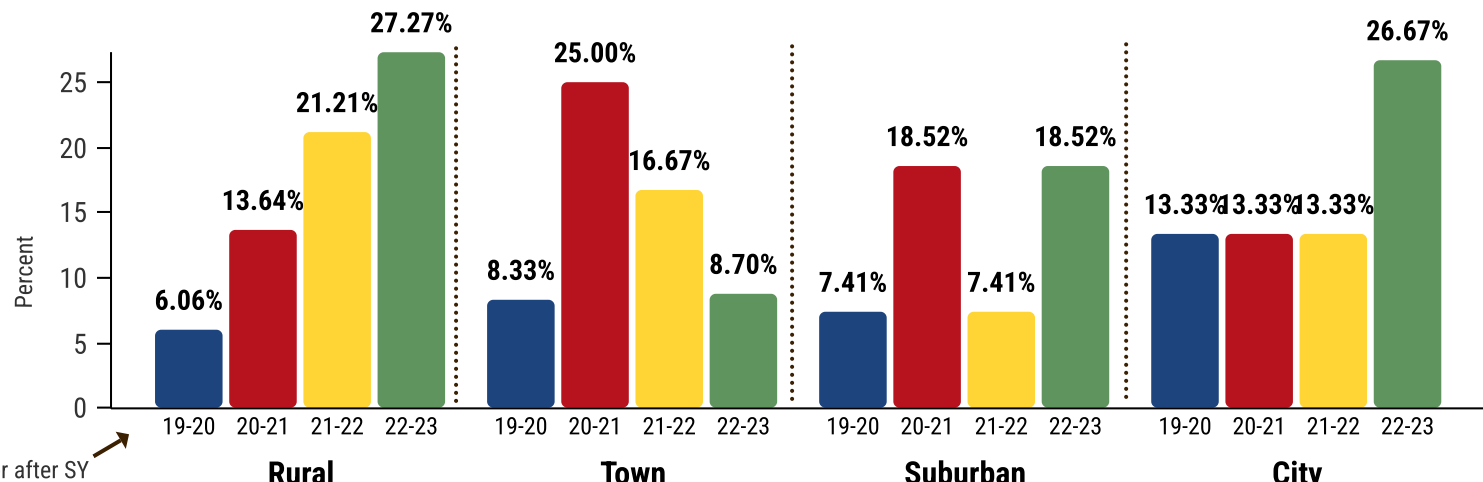
of districts experienced
2 superintendent
departures



0%

of districts experienced
3+ superintendent
departures

Superintendent Attrition by Locale & Year

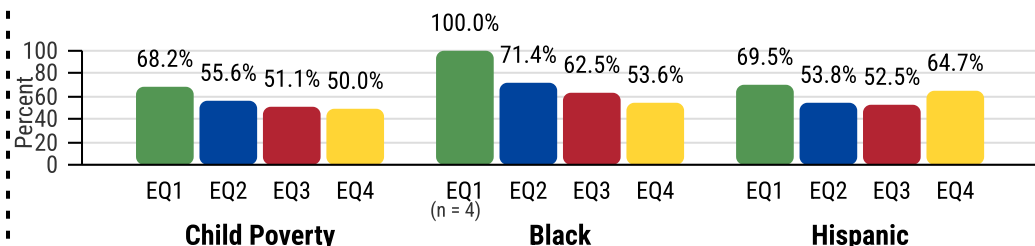


Virginia superintendent attrition has increased from lows after the 2020 school year.

Rural attrition is steadily trending upwards, while city attrition spiked after the 2022-23 school year. Town and suburban districts have experienced decreased attrition after spikes during the 2020-21 school year.

Superintendent Attrition by District Demographics

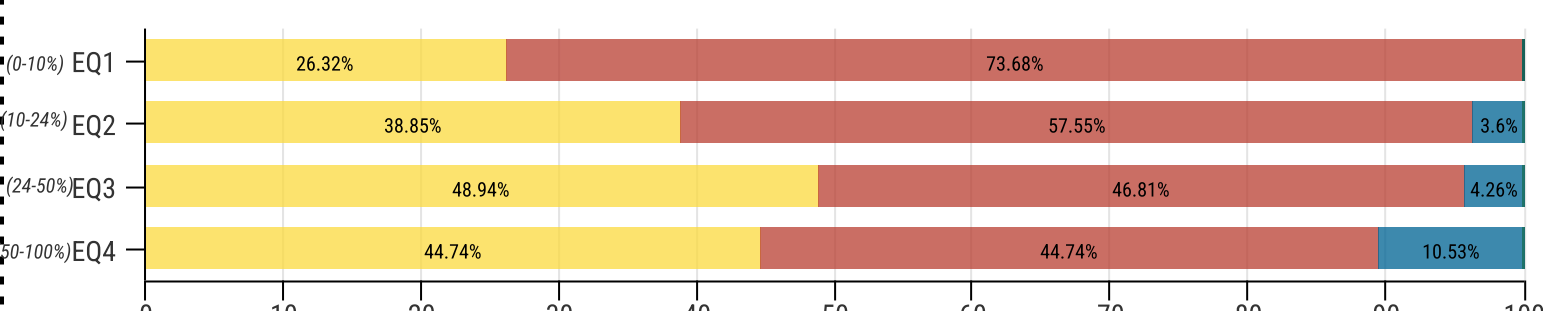
Percent of Districts that Experienced at Least One Superintendent Departure, by Select Student Demographic Enrollment Quartiles (EQ)



No statistically significant differences in superintendent departure based on % Child Poverty, % Black, or % Hispanic.

Percent of Districts that Experienced 0 to 4 Superintendent Departures, by Percent Students of Color Enrollment Quartile (EQ)

Legend: No departures (Yellow), One departure (Red), Two departures (Blue), Three or more departures (Green)



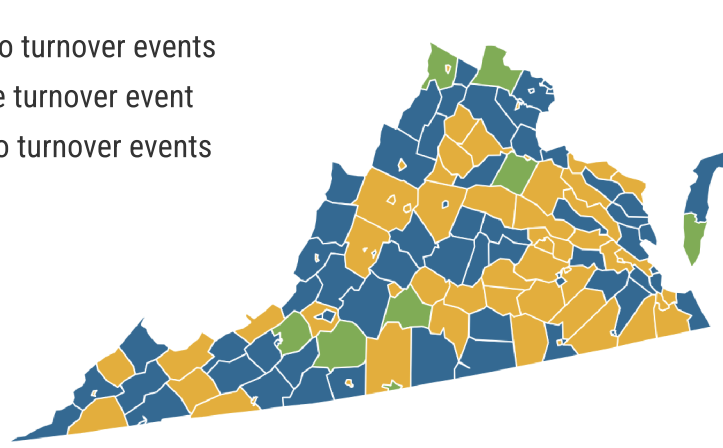
Districts with larger proportions of students of color are more likely to have experienced multiple turnover events since 2019-20.

State and federal policymakers need to consider the ways in which enduring financial inequities and underfunding of districts serving higher concentrations of students of color influence district resources and working conditions, and if and how this may contribute to undesirable superintendent churn.

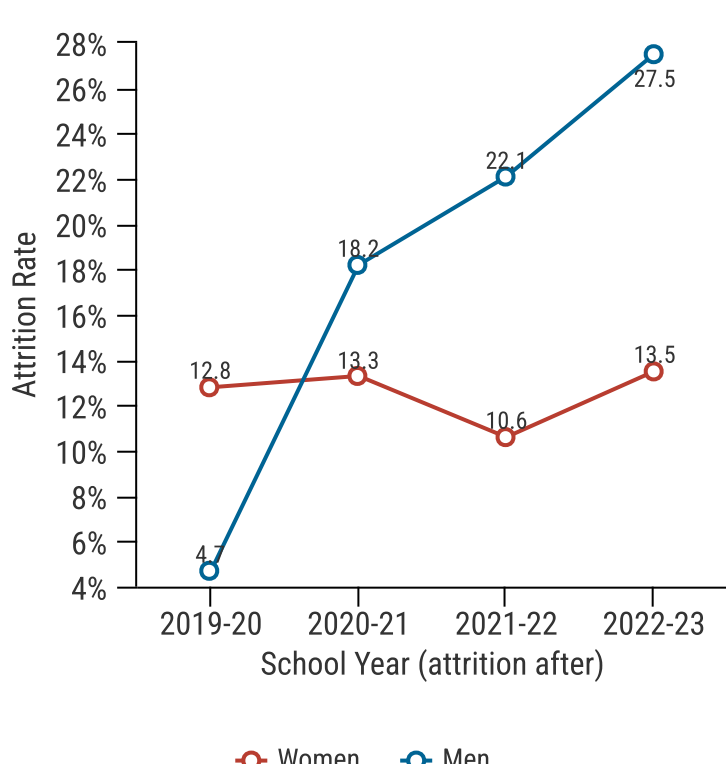
Superintendent Attrition Rates, by District, 2020-23

Rural and city districts led the state in superintendent attrition with 17.05% and 16.67% attrition rates, respectively, across four school years. Town and suburban districts had lower attrition rates.

Legend: Zero turnover events (Yellow), One turnover event (Blue), Two turnover events (Green)



Superintendent Attrition Rates, by Gender & Year



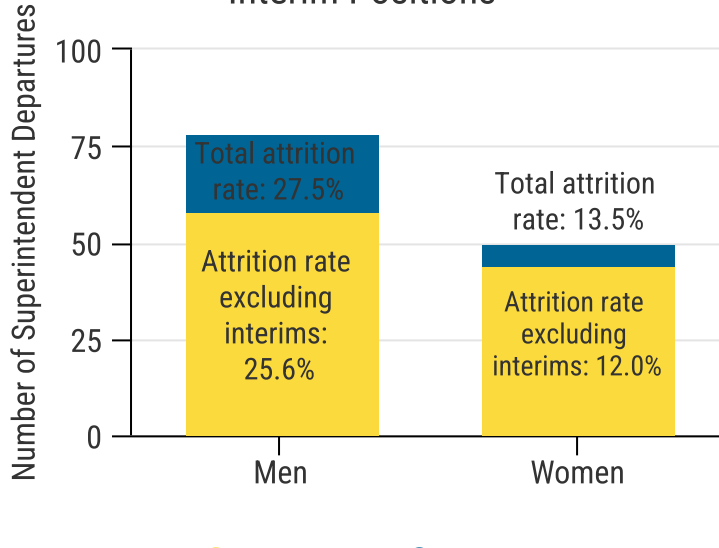
During the COVID-19 pandemic, the attrition rate for men increased at nearly double the rate it did for women. However, the attrition rate for men has stabilized around 17.0% over the last three years.

Women superintendents' attrition rate spiked to 18.2% this past year.

Concerted efforts by school boards, superintendent support organizations, researchers, and policymakers are needed to better understand the contributors to and consequences of increasing attrition rates for women.

What are the necessary steps to create supportive work environments for women superintendents?

Attrition Attributable to Permanent vs. Interim Positions



Note that women are significantly more likely to serve as interim superintendents nationwide (see TSL's Gender Gap infographic).

Virginia does not follow this national trend.

The attrition rate for male superintendents is over twice that of women.

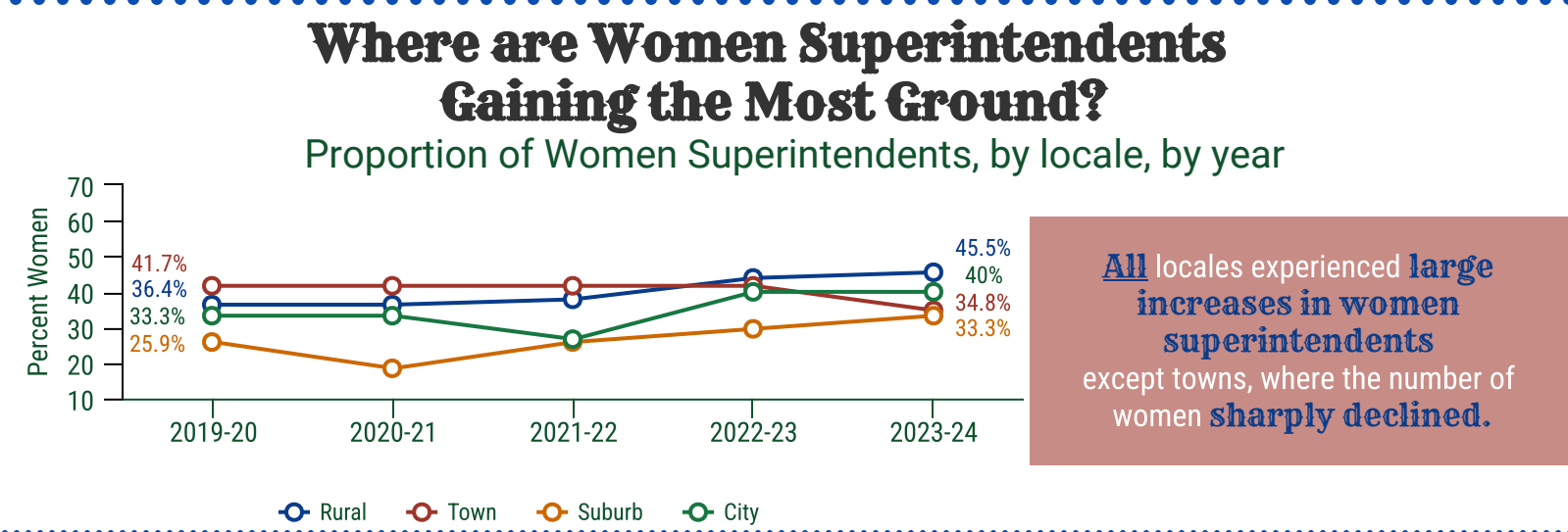
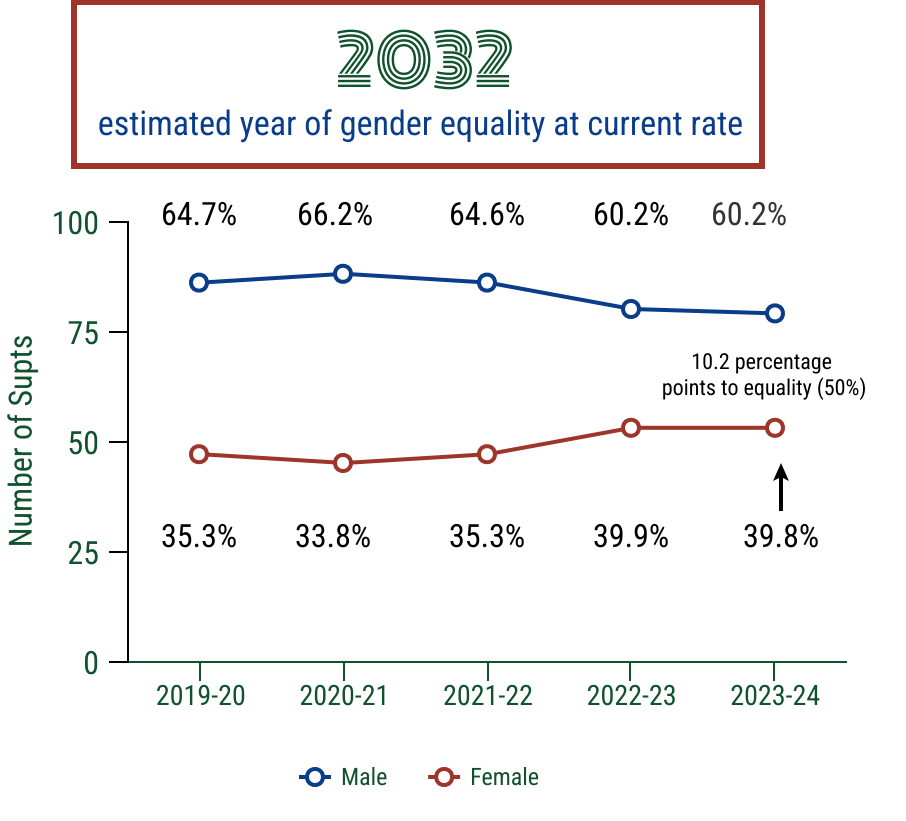
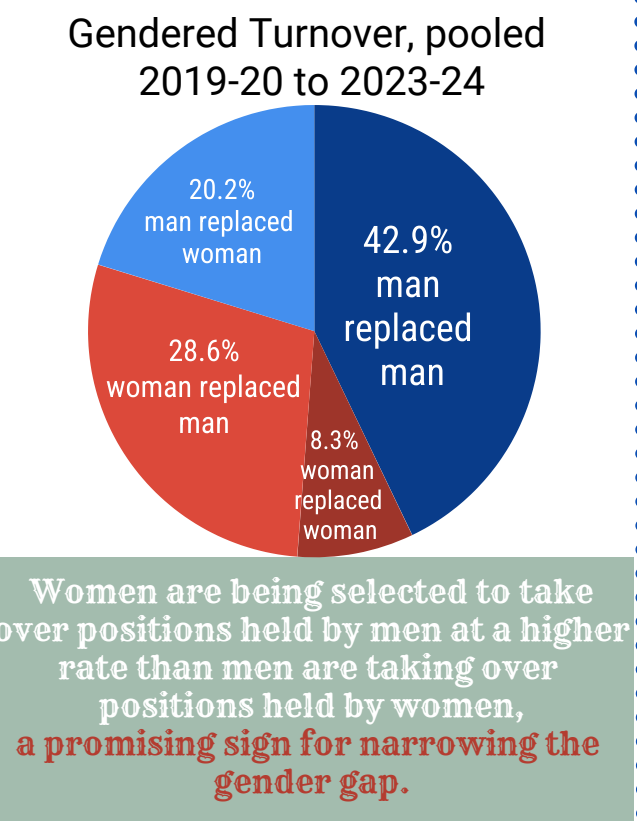
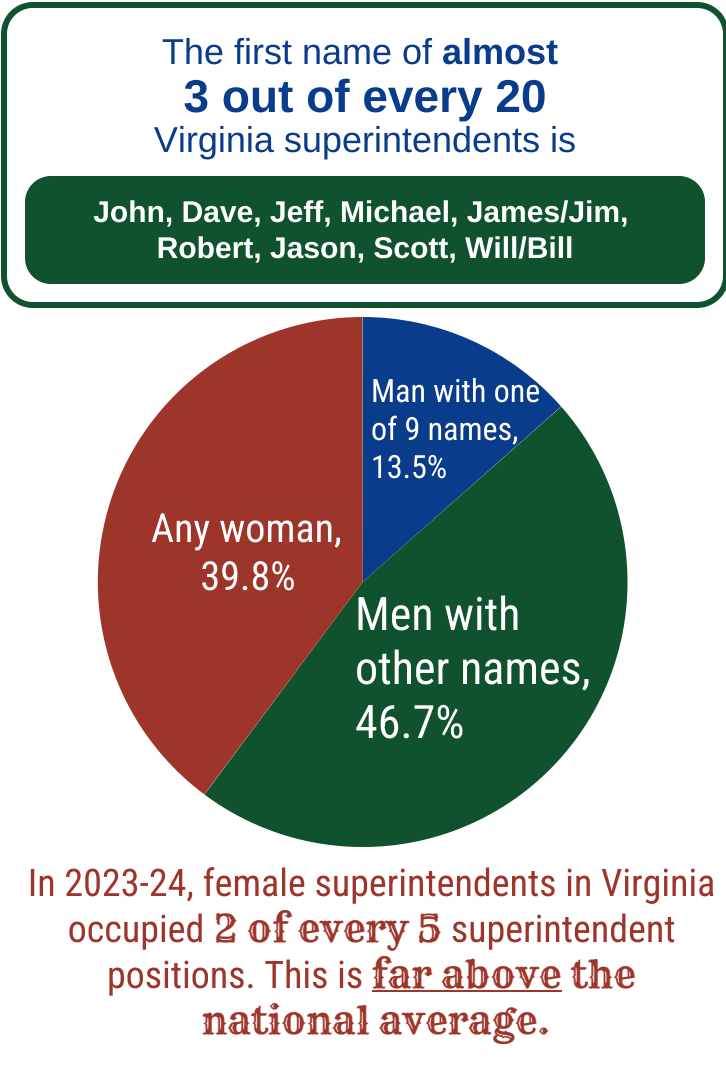
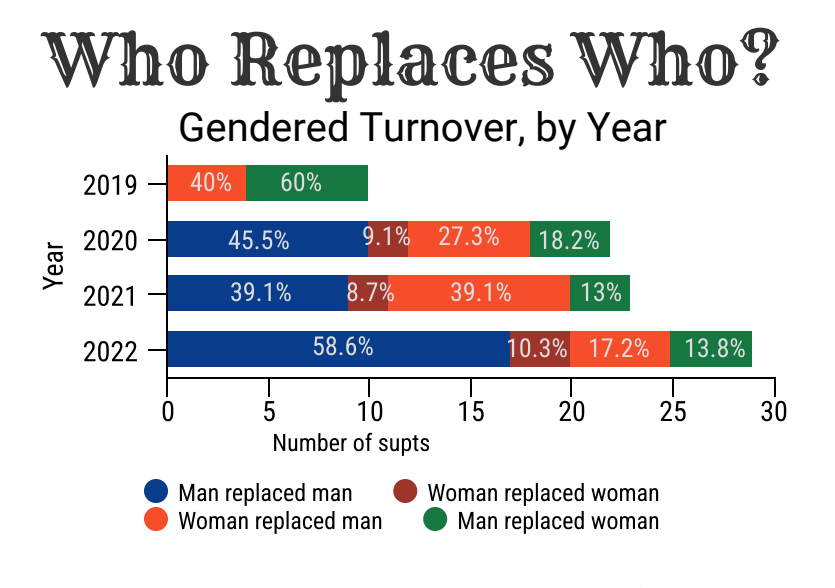


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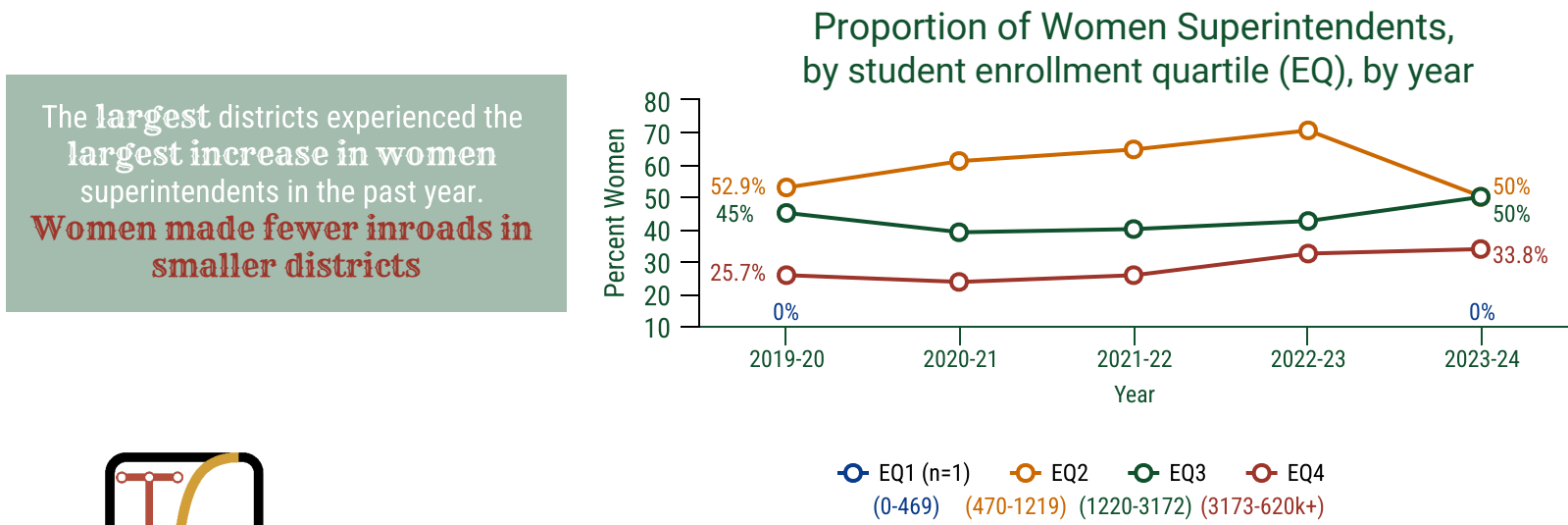
Gender and the Virginia Superintendency

2019-20 to 2023-24

By: Sarah A. Harper
Research Assistant, The Superintendent Lab; MPA Candidate, University of Tennessee



All locales experienced large increases in women superintendents except towns, where the number of women sharply declined.



The largest districts experienced the largest increase in women superintendents in the past year. Women made fewer inroads in smaller districts

