



COVID-19 and the Composition of the Massachusetts Teacher Workforce

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The COVID-19 crisis has created unprecedented disruption for school systems, educators, and the students they serve. As the pandemic progressed, news stories reported concerns over increases in teacher retirements, resignations, and requests for leaves of absence due to health concerns and the difficulty of teaching during the pandemic.² Simultaneously, reports of potential budget shortfalls induced fears of teacher layoffs and job shortages amidst a recession.³ These pandemic-related challenges had the potential to alter both the supply of and demand for teachers, particularly in Massachusetts which was an early epicenter of the pandemic.

The following analysis examines the extent to which the composition of the teacher workforce changed in Massachusetts during the early stages of the COVID-19 pandemic. We compare data from the 2020-2021 year to historical data, evaluating the extent to which patterns in teacher turnover and teacher hiring during the first year of the pandemic differed from past years.

Three central findings emerged from the analysis. First, **overall teacher turnover in Massachusetts has remained stable over the last 5 years**. Despite fears that there would be a mass exodus of teachers due to the increased pressures of the COVID-19 pandemic, we find that there was no increase in teacher turnover in Massachusetts in the fall of 2020 compared to prior years. Though it is too soon to tell what the longer-term effects of COVID-19 will be on the profession, these results suggest that there was little immediate effect on turnover among teachers employed during the pandemic's onset in spring 2020 through the 2020-2021 school year.

Yet, the stability in the state-wide average obscures important turnover patterns based on teacher experience, teacher race/ethnicity, and the economic characteristics of students in the school. Compared to prior years, **turnover decreased among early-career teachers, Black and Hispanic/Latinx teachers, and teachers in schools serving high concentrations of economically disadvantaged students**. Yet, in contrast, there were small increases in turnover among the most experienced teachers, White teachers, and teachers in schools serving the most economically advantaged student populations. Notably, the groups with decreases in turnover were the teachers and schools with the highest historical rates of turnover, which reduced some of the existing gaps in teacher retention.

Finally, **racial and ethnic diversity among newly hired teachers increased in recent years, a trend which continued into the fall of 2020**. This pattern is particularly notable among the roughly 15% of newly hired teachers who entered the profession with an emergency license, of whom nearly 30% were non-White.

KEY FINDINGS

Pandemic's Impact on The 2020-2021 Massachusetts Teacher Workforce

- Teacher turnover has remained stable over the last five years.
- More early-career teachers, Black and Latinx teachers and teachers in high-poverty schools stayed than in prior years.
- Racial and ethnic diversity among newly hired teachers continues to increase.

Note: All data provided throughout this report was provided by the Massachusetts Department of Elementary and Secondary Education (MA DESE).

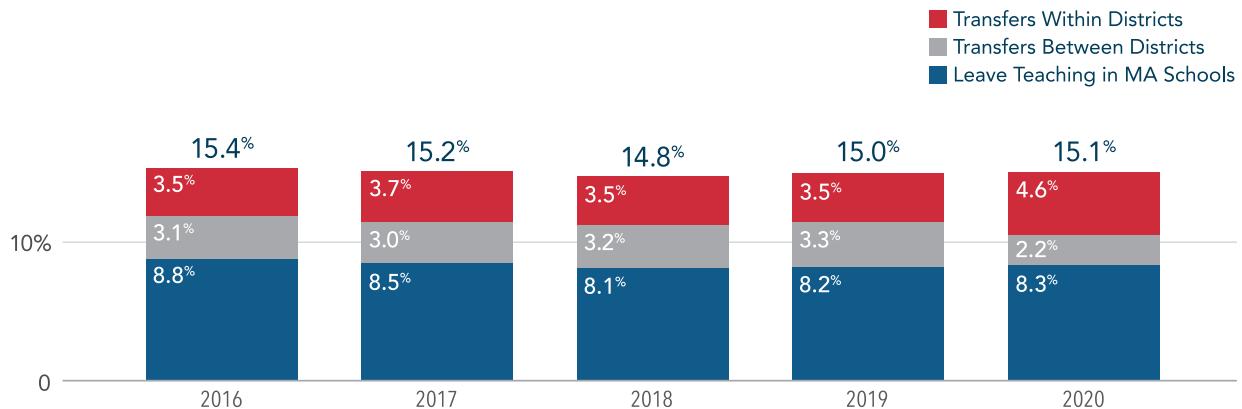
FINDING 1: Overall teacher turnover in Massachusetts has remained stable over the last 5 years.

Figure 1 shows that teacher turnover has remained steady in Massachusetts from 2016 through 2020, including from Spring 2020 into Fall 2020, which marks the first school year transition during the pandemic.

As indicated by the blue bars, the percentage of Massachusetts teachers exiting the state's teaching workforce each school year has typically been between 8% and 9%; this trend was stable in the fall of 2020.⁴

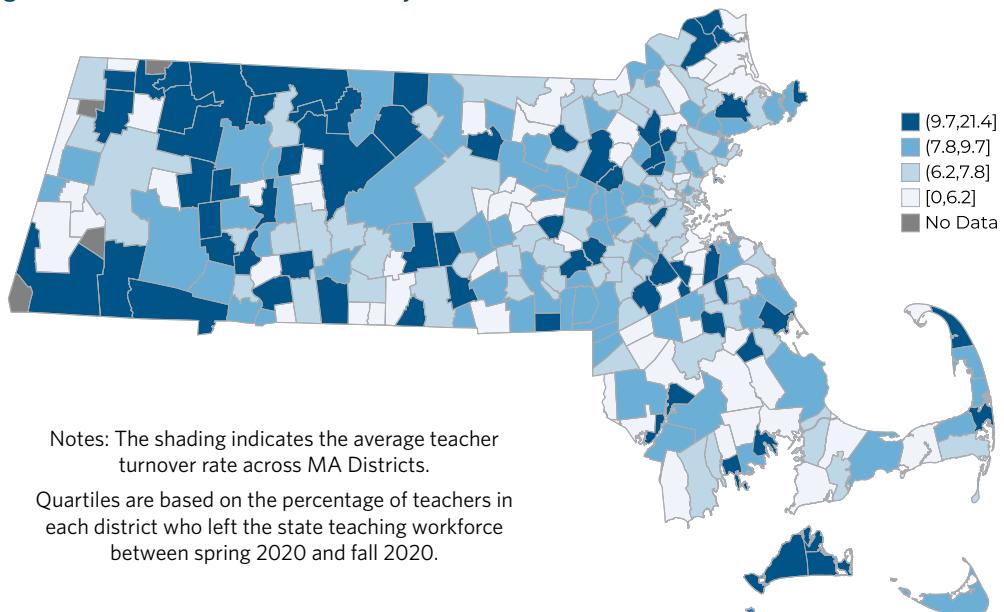
Additionally, the gray and red bars in Figure 1 represent movement between districts (gray) or movement between schools within the same district (red). On average, approximately 7% of teachers either move to a new school or district each year. This pattern also remained unchanged in the fall of 2020.

FIGURE 1: Spring to Fall Teacher Turnover By Year



Despite the stability over time at the state level, some school districts experienced substantially higher turnover rates than others in 2020. Figure 2 presents the geographic distribution of teacher turnover across districts. Each district is shaded according to the percent of its teachers that left the Massachusetts teaching workforce, with darker shades indicating higher turnover. Though high-turnover districts are spread throughout the state, a greater concentration of high-turnover districts is represented in western Massachusetts, suggesting that these districts were more severely impacted by teacher attrition during the early stages of the pandemic.

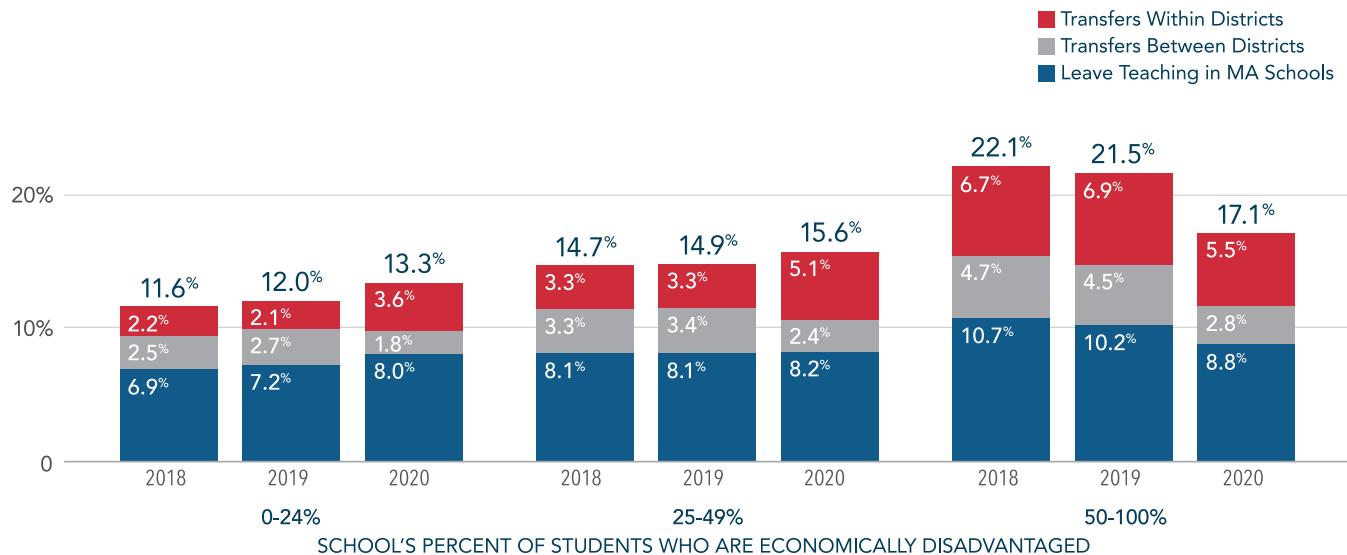
FIGURE 2: Spring to Fall Teacher Turnover in 2020 By School District



FINDING 2: School and teacher characteristics affected teacher turnover during the pandemic.

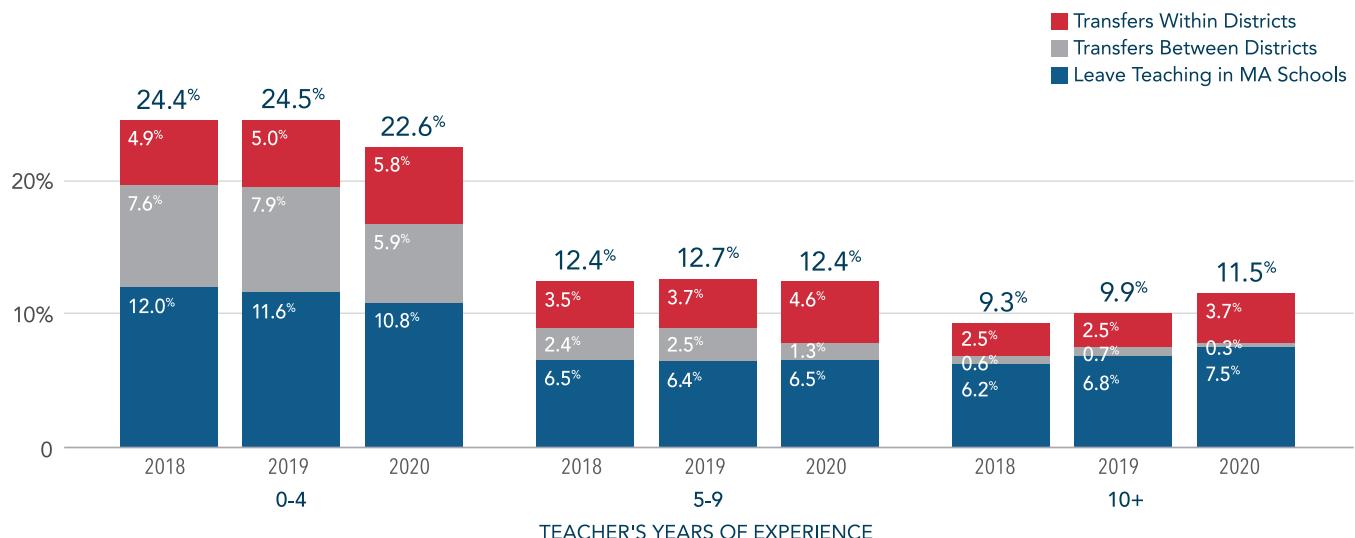
School characteristics. In the years prior to the pandemic, teacher turnover was substantially higher in schools where more than 50% of students are economically disadvantaged.⁵ However, these gaps tightened over the summer of 2020 when turnover in these schools decreased. By contrast, turnover increased slightly between the spring and fall of 2020 in schools serving more economically advantaged students (see Figure 3). A similar pattern emerged between schools serving high and low concentrations of Black or Hispanic/Latinx students, such that schools with high concentrations of Black or Hispanic/Latinx students saw lower teacher turnover during the first year of the pandemic compared to prior years, while schools serving predominantly White students saw increases in teacher turnover (See Appendix Figure A1).

FIGURE 3: Spring to Fall Teacher Turnover By Economically Disadvantaged and School Year



Teacher characteristics. In the years prior to the pandemic, turnover was typically higher among teachers in the early stages of their career than among more experienced educators. However, this gap also tightened during the pandemic. Figure 4 shows that turnover among teachers in the first 5 years of their career decreased in 2020 compared to prior years, whereas turnover among teachers with 10 or more years of experience increased slightly.

FIGURE 4: Spring to Fall Teacher Turnover By Experience Category and School Year



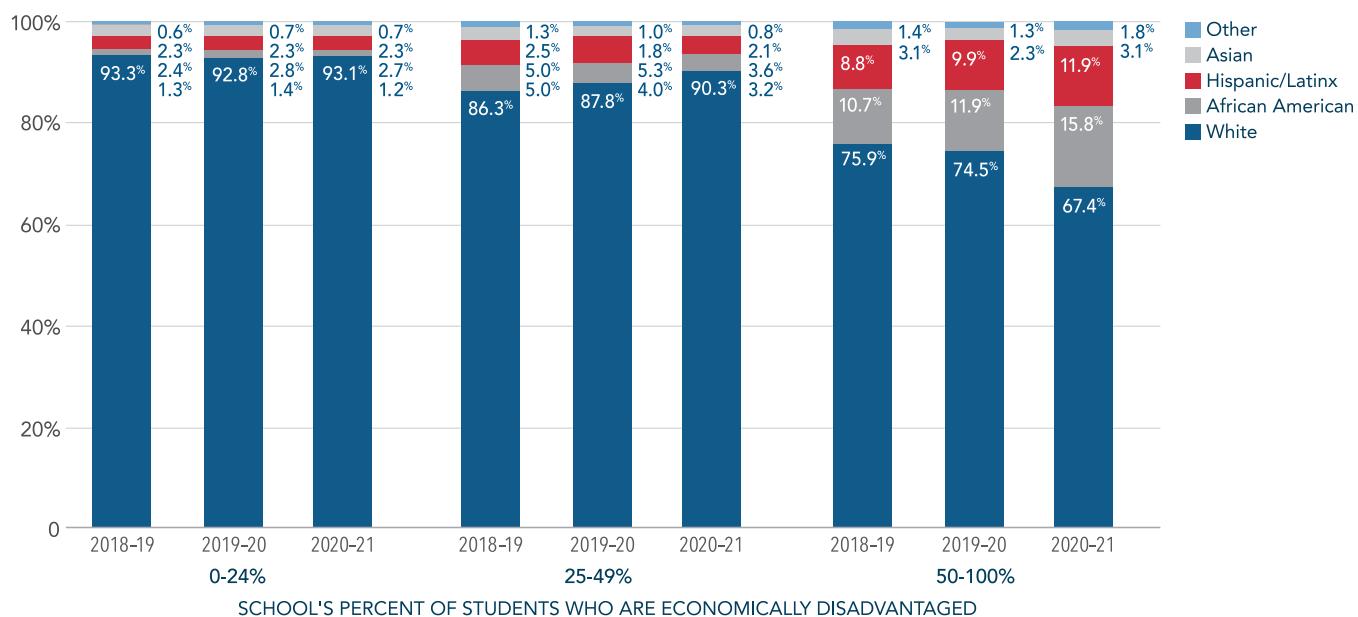
FINDING 3: Diversity continues to increase among newly hired teachers.

More than 7,000 newly hired teachers joined the workforce in the fall of 2020, comprising approximately 9% of the 2020-2021 teacher workforce. While the overall number of newly hired teachers has continued to decline slightly in recent years, there has been a consistent upward trend in the racial and ethnic diversity of the teacher workforce in Massachusetts.

The percentage of newly hired teachers who are Black or Hispanic/Latinx increased over the past 5 years from 7.6% in 2015-2016 to 13.8% in 2020-2021 (see [Appendix Figure A2](#)). As shown in Figure 5, this trend is most prominent among schools serving high concentrations of economically disadvantaged students. The same patterns exist among schools serving high concentrations of Black or Hispanic/Latinx students (see [Appendix Figure A3](#)).

Moreover, turnover among Black and Hispanic/Latinx teachers decreased during the pandemic, while turnover among White teachers increased slightly (See [Appendix Figure A4](#)). The result of these two forces—increased ethnic-racial diversity among new hires and increased retention of teachers of color—is that Black and Hispanic/Latinx teachers comprised an increasing share of the teacher workforce in Massachusetts going into the 2020-2021 school year.

FIGURE 5: Race/Ethnicity of New Hires By Economically Disadvantaged and School Year

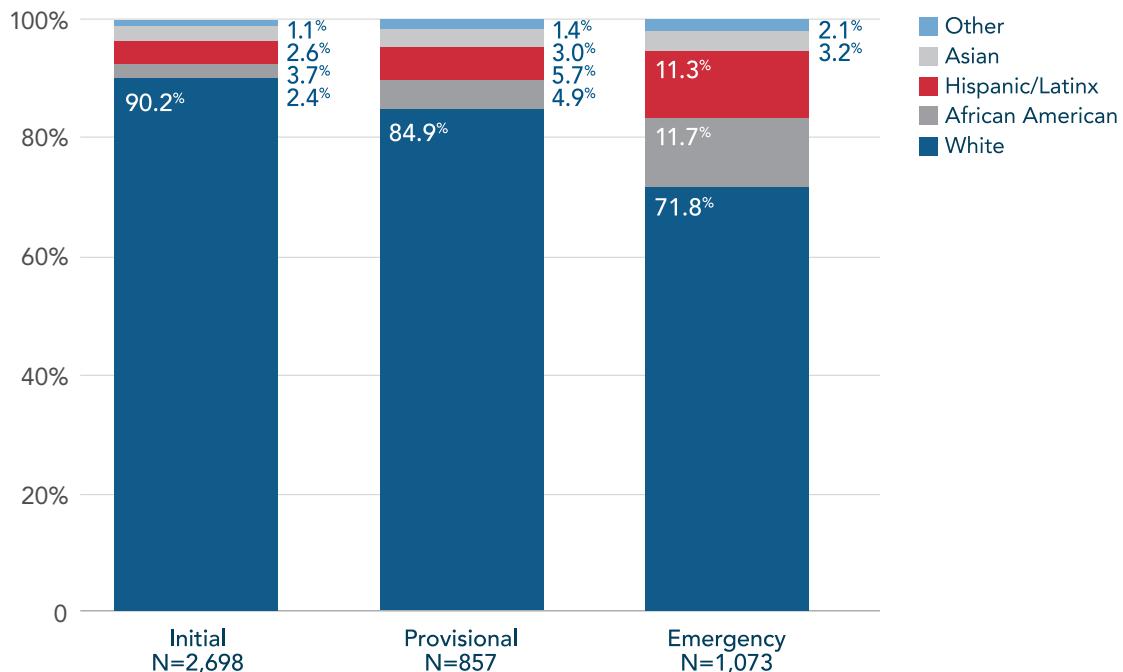


Note: The category "Other" includes American Indian, Hawaiian/Pacific Islander, and multiracial teachers.

Emergency License. One contributing factor to the increased racial and ethnic diversity among newly hired teachers is the offering of emergency teaching licenses. In response to the unique challenges raised by the pandemic that prevented many individuals from fulfilling the requirements for traditional teacher licensure, DESE created the emergency teacher license, for which individuals need a bachelor's degree and "sound moral character" to qualify.⁶ Among newly hired teachers in 2020-2021, approximately 15% held an emergency license.

Figure 6 shows that newly hired teachers holding an emergency license were substantially more likely to be Black or Hispanic/Latinx than other newly hired teachers. Approximately 30% of newly hired teachers in 2020-2021 who held emergency teaching licenses were people of color. By contrast, 10% of newly hired teachers who held initial licenses and 15% of those who held provisional licenses were people of color in 2020-2021.

FIGURE 6: Race/Ethnicity of New Hires By License Type



Note: The category "Other" includes American Indian, Hawaiian/Pacific Islander, and multiracial teachers.

Conclusion

This research brief presents an analysis of the changes in the Massachusetts teacher workforce during the early stages of the COVID-19 pandemic. Overall, we find that fears of substantial increases in turnover were not realized by the fall of 2020. On average, teachers who were employed in Massachusetts during the onset of the pandemic in the spring of 2020 were just as likely to remain in teaching as in prior years.

Nonetheless, there were modest changes among certain teacher and school populations. These patterns—perhaps surprisingly—worked in the direction of decreasing turnover among teacher populations and schools that historically had high levels of attrition. In other words, there were modest reductions in turnover gaps during the pandemic. While it is too early to tell if these patterns will persist in future years, these findings suggest that there may be important lessons to learn from these schools that were able to lower turnover during the pandemic.

We also find a continuing trend of increased racial and ethnic diversity among the Massachusetts teaching workforce. The results show continued increases in the percentage of newly hired teachers of color in the fall of 2020, which may also reflect the offering of emergency licenses. We also find sizeable increases in the share of teachers of color hired in schools serving predominantly students of color. Taken together, these patterns of increasing racial and ethnic diversity in the teacher workforce suggest that students of color in the state likely had greater access to teachers of color during the pandemic than in prior years.

Although these stable overall turnover rates and promising increases in racial and ethnic diversity among the teacher workforce are reassuring, an important limitation to these findings is that they only present trends for the teacher workforce through the fall of 2020. It is still too early to tell how the workforce responded into the fall of the 2021-2022 school year, which is a topic that we plan to address in future analysis. Additional work underway, in continued partnership with the MA Department of Elementary and Secondary Education, will also examine more comprehensively the impact of the emergency licensure on the composition of the workforce and on teaching and learning.

Note: The authors are grateful to the Massachusetts Department of Elementary and Secondary Education for providing data access, feedback, and comments throughout the research process, with particular thanks to Claire Abbott, Matt Deninger, Liz Losee, Elana McDermott, and Aubree Webb. We also thank everyone at the Wheelock Educational Policy Center for comments that improved this work.

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Figure Notes

FIGURE 1

2016: N=79,869
2017: N=79,746
2018: N=81,360
2019: N=83,067
2020: N=83,671

FIGURE 3

Percent Ec. Disadv. 0-24% 2018: N=40,207
Percent Ec. Disadv. 0-24% 2019: N=39,851
Percent Ec. Disadv. 0-24% 2020: N=36,454
Percent Ec. Disadv. 25-49% 2018: N=23,906
Percent Ec. Disadv. 25-49% 2019: N=24,497
Percent Ec. Disadv. 25-49% 2020: N=24,949
Percent Ec. Disadv. 50-100% 2018: N=16,937
Percent Ec. Disadv. 50-100% 2019: N=18,379
Percent Ec. Disadv. 50-100% 2020: N=21,770

FIGURE 4

Experience 0-4 2018: N=26,021
Experience 0-4 2019: N=25,770
Experience 0-4 2020: N=25,631
Experience 5-9 2018: N=16,170
Experience 5-9 2019: N=17,866
Experience 5-9 2020: N=18,731
Experience 10+ 2018: N=39,169
Experience 10+ 2019: N=39,429
Experience 10+ 2020: N=39,309

FIGURE 5

Percent Ec. Disadv. 0-24% 18-19: N=2,980
Percent Ec. Disadv. 0-24% 19-20: N=2,618
Percent Ec. Disadv. 0-24% 20-21: N=2,427
Percent Ec. Disadv. 25-49% 18-19: N=2,157
Percent Ec. Disadv. 25-49% 19-20: N=2,109
Percent Ec. Disadv. 25-49% 20-21: N=1,748
Percent Ec. Disadv. 50-100% 18-19: N=2,513
Percent Ec. Disadv. 50-100% 19-20: N=2,655
Percent Ec. Disadv. 50-100% 20-21: N=2,712

FIGURE 6

Initial: N=2,698
Provisional: N=857
Emergency: N=1,073

APPENDIX

FIGURE A1: Spring to Fall Teacher Turnover By Black and Hispanic/Lantinx Students and School Year

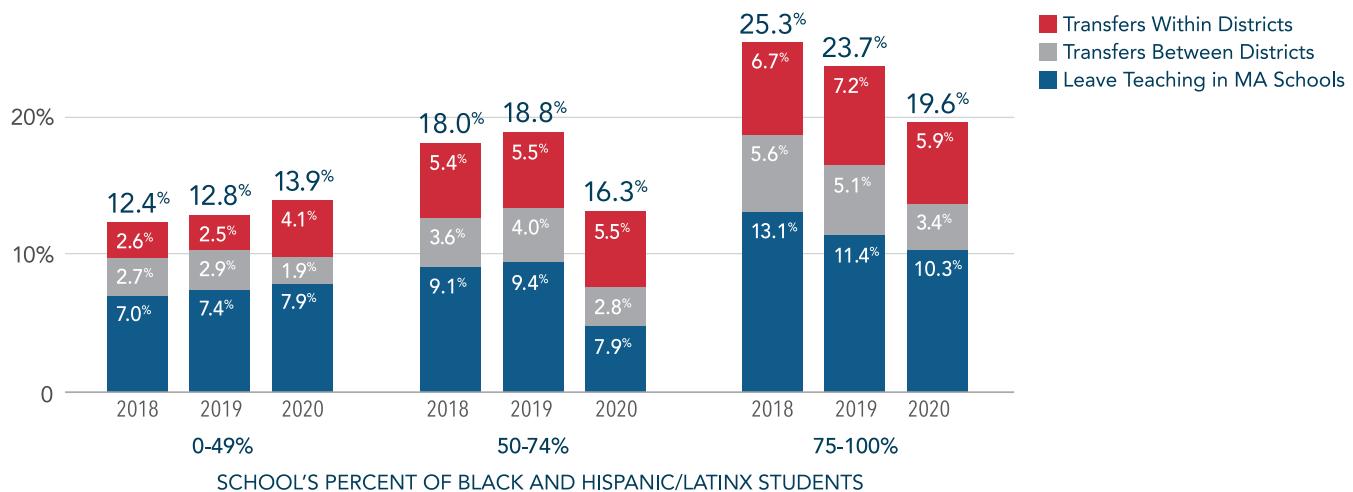
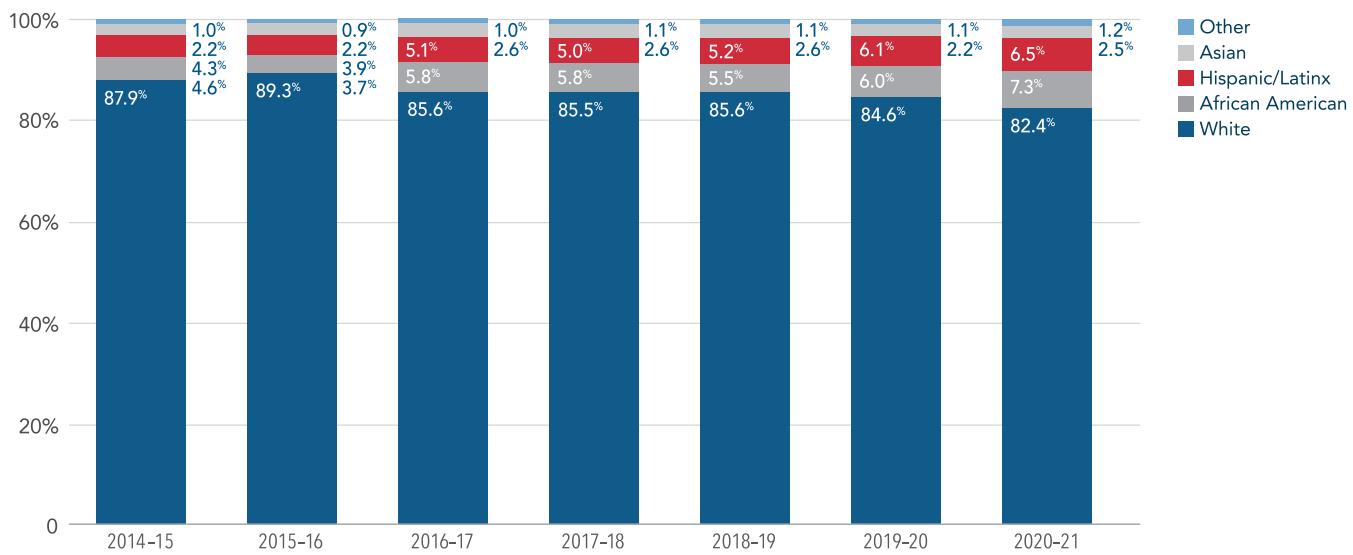
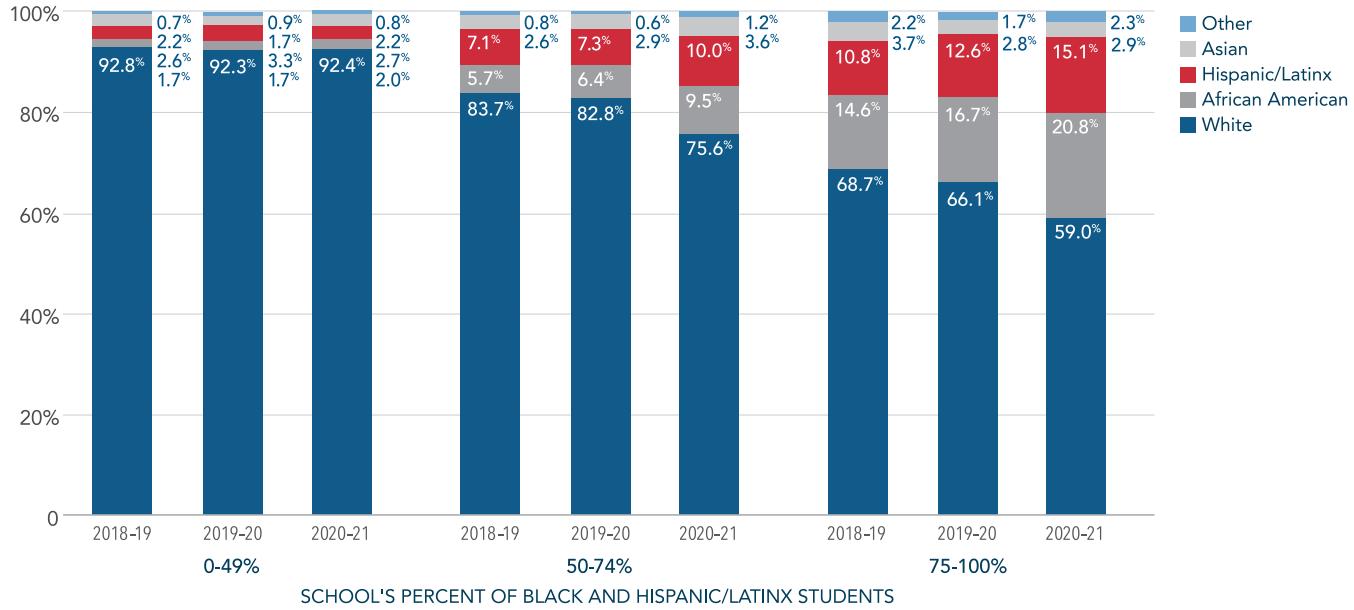


FIGURE A2: Race/Ethnicity of New Hires By School Year



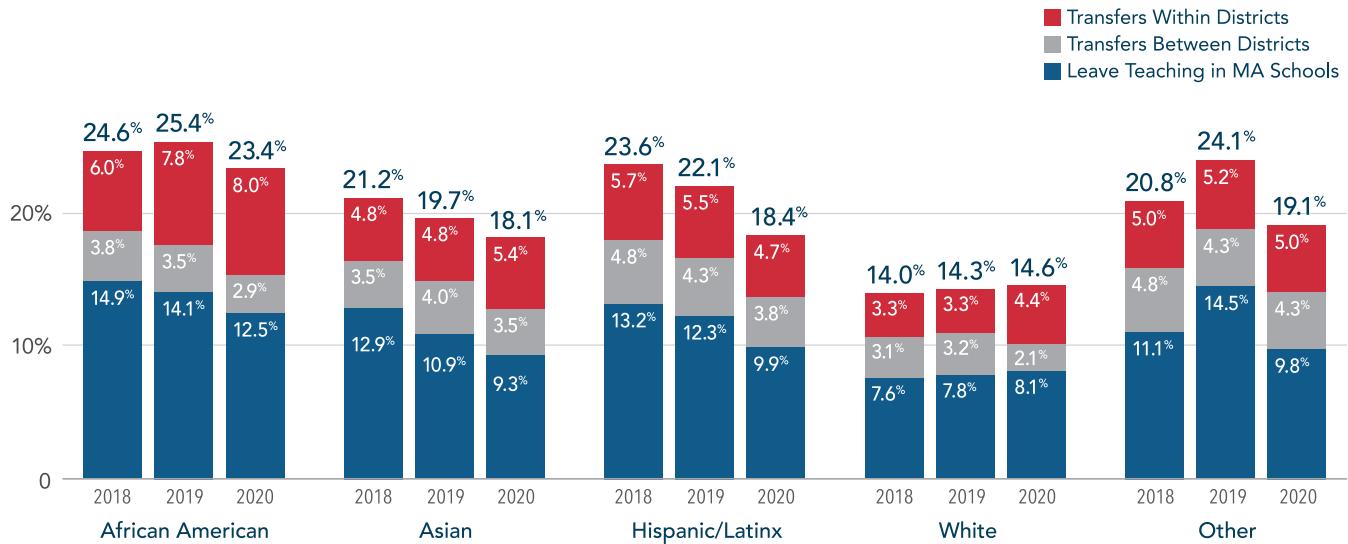
Note: The category "Other" includes American Indian, Hawaiian/Pacific Islander, and multiracial teachers.

FIGURE A3: Race/Ethnicity of New Hires By Black and Hispanic/Latinx Students and School Year



Note: The category "Other" includes American Indian, Hawaiian/Pacific Islander, and multiracial teachers.

FIGURE A4: Spring to Fall Teacher Turnover By Race/Ethnicity and School Year



Note: The category "Other" includes American Indian, Hawaiian/Pacific Islander, and multiracial teachers.

Appendix Figure Notes

Figure A1

Percent Black and Hispanic/Latinx 0-49% 2018: N=61,642
Percent Black and Hispanic/Latinx 0-49% 2019: N=61,954
Percent Black and Hispanic/Latinx 0-49% 2020: N=61,721
Percent Black and Hispanic/Latinx 50-74% 2018: N=8,548
Percent Black and Hispanic/Latinx 50-74% 2019: N=9,343
Percent Black and Hispanic/Latinx 50-74% 2020: N=9,785
Percent Black and Hispanic/Latinx 75-100% 2018: N=10,860
Percent Black and Hispanic/Latinx 75-100% 2019: N=11,430
Percent Black and Hispanic/Latinx 75-100% 2020: N=11,667

Figure A2

14-15: N=8,051
15-16: N=6,988
16-17: N=7,605
17-18: N=8,754
18-19: N=7,700
19-20: N=7,482
20-21: N=7,047

Figure A3

Percent Black and Hispanic/Latinx 0-49% 18-19: N=4,710
Percent Black and Hispanic/Latinx 0-49% 19-20: N=4,580
Percent Black and Hispanic/Latinx 0-49% 20-21: N=4,393
Percent Black and Hispanic/Latinx 50-74% 18-19: N=1,062
Percent Black and Hispanic/Latinx 50-74% 19-20: N=1,070
Percent Black and Hispanic/Latinx 50-74% 20-21: N=829
Percent Black and Hispanic/Latinx 75-100% 18-19: N=1,878
Percent Black and Hispanic/Latinx 75-100% 19-20: N=1,732
Percent Black and Hispanic/Latinx 75-100% 20-21: N=1,665

Figure A4

African American 2018: N=2,465
African American 2019: N=2,585
African American 2020: N=2,678
Asian 2018: N=1,211
Asian 2019: N=1,274
Asian 2020: N=1,290
Hispanic/Latinx 2018: N=2,458
Hispanic/Latinx 2019: N=2,602
Hispanic/Latinx 2020: N=2,759
White 2018: N=74,668
White 2019: N=76,020
White 2020: N=76,371
Other 2018: N=558
Other 2019: N=586
Other 2020: N=573

More Information & Additional Resources

For more information, visit wheelockpolicycenter.org.

ENDNOTES

- 1 Authors' names listed in alphabetic order.
- 2 For examples, see Page (2020) and Rogers & Spring (2020).
- 3 For examples, see Richards (2020) and Irons (2020).
- 4 Stability in teacher attrition during the onset of the pandemic has similarly been observed in other states, such as Washington and North Carolina (Aldeman et al., 2021; Bastian & Fuller, 2021).
- 5 The "economically disadvantaged" designation is based on a student's participation in one or more of the following programs: the Supplemental Nutrition Assistance Program (SNAP); the Transitional Assistance for Families with Dependent Children (TAFDC); the Massachusetts Department of Children and Families' (DCF) foster care program; and MassHealth (Medicaid).
- 6 Massachusetts Department of Elementary and Secondary Education. (n.d.). Academic Overview of Emergency Licenses. www.doe.mass.edu/covid19/licensure/academic-overview-for-emergency-license.docx.

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